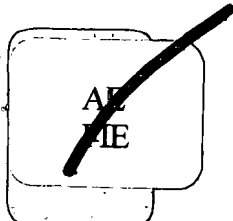


**A Field Test
of the
Prep Program:**

**Play Skill Instruction
for
Young Mentally Retarded Children**

planning & research



Alberta
EDUCATION



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Devonian Building, West Tower

11160 Jasper Avenue

Edmonton, Alberta, Canada

August, 1980

T5K 0L2

To the Reader:

Re: PREP Program

The PREP program is a program of physical activities designed for young mentally handicapped children. The program consists of an ordered set of task-analyzed instructional sequences designed to facilitate the assessment, selection, and teaching of motor skills.

The PREP program was field-tested in St. Matthew Separate and Avonmore Public Schools in Edmonton during the 1978-79 school year.

Copies of the program and the results of the field testing are being sent to all Alberta School Superintendents, Alberta Universities, Alberta Education Regional Offices, and to schools for the trainable mentally handicapped, as well as to the libraries of the Alberta School Trustees Association, Alberta Teachers' Association, Conference of Alberta School Superintendents, Micromedia and ERIC.

Yours sincerely,

M. R. Fenske
Director
Planning and Research

ATA LIBRARY

THE ALBERTA TEACHERS' ASSOCIATION
11010 - 142 STREET
EDMONTON, ALBERTA
T5N 2R1

A FIELD TEST OF THE

PREP PROGRAM:

Play Skill Instruction for Young Mentally
Retarded Children

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November 1979

(Funding for this project was received from the Planning and Research Branch
Alberta Education, and administered by the Edmonton Catholic School System.)



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ACKNOWLEDGEMENTS

Considerable support is required if a program implementation project is to be successfully conducted; from our initial discussions with Dr. I. Hastings and Dr. C. Rhodes of Alberta Education we have received that support. The enthusiastic interest and administrative help of Dr. John Brosseau and Mr. Ed. Nimko of the Edmonton Separate School Board was greatly appreciated; furthermore, the willingness of both Principals, Mr. V. Lowry at Avonmore and Mr. L. Messier at St. Matthew to facilitate the implementation of the PREP Program in their schools certainly was a great help. The interest of Dr. M. Treasure, Chairman of our Steering Committee, and the members of that Committee was appreciated.

Our special thanks must go to the four teachers and two teacher aides that worked so closely with us on this project: Mrs. Isabel Belaire, Mr. Tony Macdonald, and Mrs. Carole Poxon at St. Matthew School and Mr. Bill Hamilton, Mrs. Sherri Paziuk and Mrs. Marie Callihoo at Avonmore School were interested, enthusiastic, ready to try new ideas, and always positive in their suggestions for improvement. We truly enjoyed working with them.

We cannot name all of the children at both schools who participated in the PREP Program; nevertheless, we would like to thank all of them. They represent to us the needs of all young moderately mentally handicapped children and by trying to involve them, teach them, and play with them, hopefully, they have helped us develop program materials and methods that can help other children to smile as often as they did in the gymnasium.

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INTRODUCTION

Young children who are moderately mentally handicapped require specially designed physical education programs if they are to reach their full motor developmental potential. Dr. Patricia Austin of the Department of Physical Education, University of Alberta, recognized this fact and initiated the PREP Project which, for the past five years, has conducted research on the development, implementation, and evaluation of motor development curriculum materials and instructional methods for use with these children (Wall, 1976; Watkinson, 1976).

The major objectives of the PREP Project since its inception have been:

- (1) the development, implementation, and formative evaluation of physical activity curriculum materials for young moderately mentally handicapped children based on task-analyzed instructional sequences;
 - (2) the analysis of individualized instructional strategies and the development of effective teaching methods based on this analysis;
 - (3) the development of physical activity curriculum material for group instruction situations designed to foster the development of group play skills, and
 - (4) the development of audio-visual materials for use with in-service teacher education programs and University courses. These aids include video-tapes, slides, slide-tape materials, and films.
- The result of the research efforts of the PREP staff has been the

development of an internationally recognized physical activity program model that has been well documented (Watkinson, 1976; Watkinson and Wall, 1977; Wall, 1977; Watkinson, 1977; Watkinson and Wall, 1978 a + b). The interest in the PREP materials by teachers and other professionals over the past few years testified to the need for curriculum materials and instructional methods that are appropriate for these children. As noted before, the PREP Project has realized its program development objectives; however, the final stage of a sound curriculum development model is the implementation and evaluation of the materials in a field setting. In preparation for the present study, a pilot study was conducted at Avonmore School during February, March and April, 1978 (Watkinson and Wall, 1978).

A number of modifications to the PREP Program Model were made following that pilot project. In July, 1978 a research proposal was submitted to the Planning and Research Branch of Alberta Education outlining the objectives and research methods for the present field testing of the PREP Program (Watkinson and Wall, 1978). On December 18, 1978 the proposed field test project was approved with funding administered by the Edmonton Separate School Board under the direction of Dr. John Brosseau. The Edmonton Separate and Edmonton Public School Boards agreed to participate in the project and two classes of moderately mentally handicapped children from St. Matthew Separate School and Avonmore Elementary-Junior High School were selected as the field test classrooms.

On January 8, 1979 a Steering Committee meeting was chaired by Dr. M. Treasure, Alberta Education, Planning and Research Branch. The members of that Committee were Mrs. Jean Moore, Regional Consultant,

Alberta Education, Calgary, Mr. Jack Flaherty, Regional Consultant, Alberta Education, Lethbridge, Dr. John Brosseau, Assistant Superintendent, Edmonton Catholic School System, Ms. Joanne Ritcey, Reading Specialist, Edmonton Catholic School System, and Ms. Barb Johnson, Administrative Assistant, Edmonton Public School System (representing Dr. Tom Blowers). The PREP Program Field Test Project Proposal was discussed and with minor modifications was accepted. The major objectives for the field test project were:

- (1) the development, implementation, and formative evaluation of an inservice training package designed to help teachers of young moderately mentally handicapped children implement an individualized instruction play program based on the PREP Program materials and methods;
- (2) the provision of on-going field consultations on the implementation and monitoring of the program to the teachers during selected physical education periods over the program implementation period;
- (3) the formative evaluation of the PREP Program curriculum materials and methods during the program evaluation period, and
- (4) the completion of an objective evaluation of teacher feedback on the use of the PREP materials and methods.

In order to implement the above field test project, the teacher competencies that were required were defined and training materials for them developed as outlined below.

Teacher competencies for the implementation of the PREP model have been identified and pilot-tested for four years. Each competency has several components that must be systematically acquired for satisfactory

implementation of the program. The competencies are listed below:

- (a) The teacher can critically observe and systematically assess the play patterns of mentally handicapped preschoolers in terms of amount of play, type and purposefulness of play, skills and objects used in play.
- (b) The teacher can comprehensively assess a child's play skill repertoire using the PREP Individual Student Profile.
- (c) Using data gathered from assessments of play patterns and play skills, the teacher can prescribe an individual instructional program for each child by applying the rationale, guidelines and criteria identified in the PREP model.
- (d) The teacher can implement individually prescribed instructional programs for a group of children, applying the teaching techniques described in the PREP curriculum.
- (e) The teacher can monitor student progress in prescribed skills by recording and graphing student performance on task sequences.
- (f) The teacher can evaluate instruction based on student performance to make decisions relative to program change, termination of instruction, and appropriateness of instructional strategies.
- (g) The teacher can implement a program of systematic skill maintenance after initial skill acquisition.
- (h) The teacher can plan, conduct and evaluate sessions of group instruction with six to ten children.

For each of these competencies and their component parts, training packages were developed to give the teachers and aides the requisite knowledge of each competency and to provide suitable experiences to assist them in applying these competencies in the field. These training

materials include:

(a) Appropriate and sufficient materials for initial instruction in each competency. These materials include written and lecture materials, audio-visual materials as well as extra resource materials.

(b) Task activities to be completed by the teacher with assistance from and supervision of a consultant. These tasks were designed to give the teacher the experience necessary to implement each competency.

The Field Test Project Procedures, Results of the Program Implementation and Evaluation and a discussion of these are presented in the following section of this report.

FIELD TEST PROJECT PROCEDURES

In preparation for the field testing of the PREP Program, Dr. A.E. Wall met with the Principals and teachers of the above two schools in November, 1978. An appropriate schedule for the inservice training sessions and class times for the PREP Program were established. It was agreed that four half-day inservice training sessions would be held during which replacement staff for the four teachers and two teacher aides participating in the study would be available. As indicated in Appendix A, two different schedules of class times were established for the classes at Avonmore and St. Matthew schools depending on the availability of gymnasium space and the established curriculum for the two classes.

Inservice Training Program

The PREP staff presented four inservice training sessions during the field test period. The initial session was held on Wednesday, January 10, 1979 at the Edmonton Separate School Board; the topics discussed and the program aids used during that session included:

- Topics:
1. Why individualized instruction in gross-motor skills?
 2. Outline of the PREP Program Model.
 3. Systematic observation of free-play.
 4. Gross-motor assessment procedures.
 5. Guidelines for Program Implementation.

Program Aids: Videotape on "Orientation to the PREP Program" and
"Assessment".

Handout on Assessment.

Overheads on the program model and assessment instruments.

The second inservice training session was held at the Edmonton Separate School Board's St. Anthony Teacher Centre on Monday, January 22, 1979; the topics discussed during that session included:

- Topics:
1. Discussion of program to date.
 2. Prescription of target skills.
 3. Use of task-analysed instructional sequences.
 4. Testing, recording and graphing of student progress.
 5. Evaluation of pupil progress.

Program Aids: Overheads of task sequences and response continuum.

Slides on Prescription.

PREP Manual (1976).

The implementation of the program in the two schools began following the above inservice training sessions.

The third inservice training session was held at the Teacher Centre on Monday, February 12, 1979. The topics and program aids for that session included:

- Topics:
1. Evaluation and discussion of pupil progress.
 2. Leadership of group activities.
 3. Instructional strategies.

Program Aids: Videotapes on "Group Work" and "Instruction".

The final inservice training session was held on April 9, 1979 at the Teacher Centre. The topics discussed at that session included:

- Topics:
1. Suggested Group Work Activities.
 2. Analysis of instruction with videotape.
 3. General discussion of program to date.

Program Aids: Teaching Group Activities.

Group Activities.

Video-tapes on Individual Instruction.

The major topics addressed during the above four inservice training sessions have been included in the revised PREP Manual (Watkinson and Wall, 1979). Each of the key teacher competencies outlined in the PREP Program Field Test Project Research Proposal were addressed during these sessions (Watkinson and Wall, 1979). In order to evaluate the effectiveness and relevance of each of the inservice training sessions the teachers and aides completed the evaluation forms in Appendix B.

Program Implementation

The PREP Program Instructional Model consists of six major program phases that have been presented in detail in the revised PREP Manual (Watkinson and Wall, 1979). The essential phases include the assessment, prescription, and task step selection procedures that are completed prior to the instructional phase and the monitoring and maintenance procedures that facilitate the evaluation of the progress made by each pupil on the selected target skills.

The assessment procedures were initiated following the January 22, 1979 inservice training session and they were completed in two distinct phases. The initial phase consisted of the teachers using the Free Play Inventory which helped the teachers complete an observational assessment of the play skills which the children used during free play (Appendix C). This task was completed from January 12 - 15 and January 12 - 17, 1979 by the teachers and aides at St. Matthew and Avonmore schools respectively. The comprehensive assessment of the play skills of the children was then completed using the Individual Student Profile form, again following the procedures outlined in the inservice training session on assessment (Appendix D). This task was completed from January 16 to 25,

1979 at St. Matthew School and during the period of January 18 to February 4, 1979 at Avonmore School. If the equipment for a specific target skill outlined, for example the trampoline, was not available then this skill on the Profile was not assessed.

After the teachers had completed the above assessment procedures, the specific target and control skills for each child were prescribed following the program implementation guidelines (Appendix E). Depending on the needs of the individual children and following the PREP Program procedures, the teachers prescribed three or four target skills for instruction and multiple-baseline design purposes. This task was completed by January 25 and February 5, 1979 at St. Matthew and Avonmore schools respectively.

Immediately following the prescription of target skills, individual instruction during free play began. Some of the pupils, especially those in the St. Matthew's program, were quite proficient in the initial target skills outlined in the PREP Manual; therefore, new task analysed instructional sequences were developed at the Adapted Physical Activity Research and Demonstration Centre for these children. Individual pupil progress was recorded after each instructional session following the monitoring procedures outlined in the PREP Manual and discussed during the inservice training session on this topic. When a pupil reached the highest step on a prescribed target skill then that skill was placed on maintenance and instruction was initiated on a new target skill. The information on pupil progress recorded on the Daily Record Sheets was transferred to individual graphs to facilitate the evaluation of the progress of each child in the class.

In order to assess inter-tester agreement, the program consultant

evaluated the performance of each child on two target skills on random dates throughout the program. The program consultant completed this task during the three visits within each two week period that she made to both schools. During these visits the consultant answered any questions put to her by the teachers and aides, advised the teachers on the prescription, instruction and maintenance aspects of the program, and facilitated the completion of the research design aspects of the project. Appendix F includes the log kept by the program consultant during the field test project.

Program Evaluation

The program evaluation aspects of the field test project consisted of three distinct phases. The initial phase included the evaluation of the children's progress on the prescribed target skills in relation to their performance on the control skills as summarized on the PREP Program progress graphs. The rationale and recommended criteria for progress evaluation used in this phase of the evaluation have been outlined in a number of recent sources (Jones, 1978).

The second phase of program evaluation consisted of the distribution of a Program Evaluation Questionnaire to the four teachers and two aides during the week of May 14, 1979 (Appendix G). This questionnaire consisted of twenty-four questions with Likert-scale responses and six open-ended questions that attempted to measure the effectiveness and value of the PREP Program and Materials, the PREP Inservice Program and the Program Implementation and Program Effectiveness aspects of the field test project. The teachers individually completed the Program Evaluation Questionnaire by May 24, 1979.

The third phase of the program evaluation process included individual interviews conducted by Mr. Udaya Dash, a Ph.D. student in Educational Psychology, using the Program Evaluation Questionnaire as a guideline during the week of June 4, 1979. The external evaluator asked each teacher and aide to rate the twenty-four Likert-type questions again. The teachers and aides did not have access to their original answers to the questions and they were encouraged to be as candid as possible in their responses. An inter-rating agreement score between the initial results and the results obtained by the external evaluator was completed. The external evaluator conducted the interviews during one day at each school and submitted the results of his interviews and an overall evaluation of the effectiveness of the major aspects involved in the PREP Program Field Test Project by the end of June, 1979.

RESULTS AND DISCUSSION

The results and discussion of this field implementation project will be presented in three major sections related to: a) Inservice Training, b) Pupil Progress, c) Program Evaluation.

Tables 1 and 2 include summaries of the personal characteristics of the twenty-three children who were involved in the program.

Unfortunately, the records of another four children could not be used as their teacher used recording procedures that were not congruent with the PREP Program Model. An analysis of the individual characteristics of the children in each class indicates that the Avonmore pupils were considerably younger in chronological age and lower in their general level of functioning. Other differences between the children and the two class settings will be discussed in the program consultant's report.

Inservice Training

Four inservice training sessions were presented by the PREP staff for the teachers and aides. Table 3 summarizes the responses of the teachers to those four sessions that were provided immediately following each session. All of the responses are positive in nature. The teachers seemed to be particularly pleased with the session on Group Work and the Analysis of Instruction. The teachers did mention the fact that they believed more group discussion sessions would have been valuable.

Pupil Progress

Prior to a presentation and discussion of the results of the individual progress graphs of the twenty-three children who participated in

Table 1. Summary of the Major Characteristics of Pupils
in the St. Matthew School Program

<u>Pupil Number</u>	<u>Age (Years)</u>	<u>Height (cm)</u>	<u>Weight (kg)</u>	<u>Psychometric Data</u>	<u>Etiology</u>	<u>Physical Limitations</u>	<u>Behavioral Characteristics</u>
1	8.6	130.8	27.2	S.B.-52	Brain damaged	Mild spasticity	Enjoys P.E.
2	9.1	133.4	38.6	S.B.-42	Language delayed	Poor motor control	Enjoys P.E.
3	6.9	110.5	21.6	S.B.-51	Down's Syndrome	Hip displacement	Dislikes P.E. Very shy
4	8.5	132	29.0	S.B.-49	Unknown	None	Withdrawn
5	8.4	130.8	31.8	S.B.-52	Language delayed	None	Enjoys P.E.
6	6.0	129.5	33.6	-	Unknown	None	Short attention
7	7.0	107.9	17.8	S.B.-44	Convulsions	Uncoordinated	Withdrawn
8	12.11	153.7	76.3	-	Unknown	Overweight	
9	10.2	120.6	22.2	S.B.-49	Unknown	None	Enjoys P.E.
10	5.11	101.6	16.3	-	Down's Syndrome	None	Very stubborn
Average	8.1	125	31.4				

Table 2. Summary of the Major Characteristics of Pupils
in the Avonmore School Program

<u>Pupil Number</u>	<u>Age (Years)</u>	<u>Height (cm)</u>	<u>Weight (kg)</u>	<u>Psychometric Data</u>	<u>Etiology</u>	<u>Physical Limitations</u>	<u>Behavioral Characteristics</u>
11	7.6	121	23	-	Down's Syndrome	None	
12	7.6	117	22	S.B.-39	Unknown	None	Short attention
13	9	114	24.5	-	Down's Syndrome	Heart defects	
14	7.7	111.5	23	-	Down's Syndrome	Heart defects	
15	7	114	27	-	Down's Syndrome	None	
16	9.1	116	20	-	Down's Syndrome	None	Short attention
17	6.8	116.5	21	47	Unknown	Spastic diplegia	
18	6	119.5	31	55	Unknown	Overweight	Very clumsy
19	8	107	19.5	-	Down's Syndrome	Very small	
20	6.5	116	21	48	Unknown	None	
21	7.4	120.5	25	29	Unknown	None	
22	6.5	113	21	-	Unknown	None	
23	7.4	115.5	20	-	Down's Syndrome	None	
Average	7.4	115.5	22.9				

Table 3. Evaluation of PREP Inservice Sessions
(Percentage of teachers and aides responding)

Question	Session 1	Session 2	Session 3	Session 4
	Introduction	Prescription	Evaluation/ Teaching	Group Work Teaching
1. Presentation				
a) Well organized	50	80	75	100
b) Reasonably organized	50	20	25	
c) Sections unclear				
d) Difficulty with session				
2. A-V Materials				
a) Very helpful	75	60	75	100
b) Helpful	25	40	25	
c) Some value				
d) Seemed unrelated				
3. Amount of Material				
a) Too much material		20		
b) Sufficient material	100	80	100	100
c) Could cover more				
d) Additional material needed				
4. Handouts				
a) Very helpful	75	60	50	75
b) Helpful	25	40	50	25
c) Not needed				
d) Needed more				

the program, it may be valuable to consider the perceptions of the program consultant regarding some of the similarities and differences between the two programs.

The Avonmore students were younger, generally smaller and seemed less capable than their counterparts at St. Matthew. The basic PREP target skills were highly appropriate and assessment indicated relatively low levels of acquisition and the need for concentrated instruction. Progress through the individual teaching model was affected by several factors: PREP was scheduled only twice a week, one one-hour session, one half-hour session. Each of these sessions was conducted in a different facility with different equipment thereby exposing the student to some target skills only once a week. Other individual programs were also scheduled concurrent with physical education, e.g. speech therapy, dental hygiene, etc. for which students were removed from sessions. These interruptions coupled with student absences made progress somewhat difficult for many. Longer episodes of individual instruction were necessary, leaving less time for recording, an aspect of the program that proved extremely difficult in this situation. In addition, both classes at Avonmore attended each session, therefore, there were more students in the facility, less equipment time per student, a wider range of ability, and more distractions present than in the smaller classes conducted at St. Matthew. Overall, however, the free play of the students was well established and the teachers, through the analysis of their instruction, became very adept at working within the PREP model resulting in student gains and some skill acquisition in most cases. In general, the social atmosphere of the class and the quality of play seemed much improved over the four month period.

Generally, the students at St. Matthew seemed somewhat older and more physically mature than those enrolled at Avonmore and skill assessments indicated a higher level of gross motor performance. Several students were competent in the PREP target skills and, therefore, a series of more advanced skills were incorporated into the profile. Separate sessions were held for each class, with four and often five forty-minute periods scheduled each week with a maximum of eight students in each. Unfortunately, some target skills were unable to be included owing to the lack of equipment; however, when possible, time and funds permitting, necessary items were purchased. The concentrated effort provided here is clearly reflected in the performance gains of the students as individually graphed. The greater number of classes permitted more familiarity with the task sequences and, therefore, made recording somewhat easier although teachers still reported dissatisfaction with the process. The greater number of classes also provided more time for the implementation of group work thus enabling the classes to establish the routine of individual instruction in free play, followed by group work followed by free play. Through the analysis of instruction exercises, teachers became more aware of the contingency model included in PREP, thus becoming more efficient in the instruction-recording aspect of the program. Overall, PREP provided a workable class model through which obvious gains in individual motor performance were seen and an enjoyable social class atmosphere established.

St. Matthew Classes

Pupil 1 was an eight year old girl who had been diagnosed as brain-damaged with mild spasticity. The teacher reported that she had very good receptive and expressive language but noted that she acted very

immaturely during class. As illustrated in Figure 1, she received initial instruction on tricycle riding and running. She made good progress on the tricycle task sequence and some improvement on a lower task step of the running sequence. The initiation of instruction on the control skill of ball bouncing resulted in clear gains in performance.

Pupil 2 was a nine year old boy with unknown etiology who exhibited good receptive language but very poor expressive language. The teacher noted that he was very unsure of himself and had poor gross-motor and fine-motor control. As illustrated in Figure 2, initial instruction was given on the walking up an incline and running task sequences; very clear increases in skill proficiency were noted in a short time period on these two skills. Clear performance gains were made on the control skills of hopping and forward rolling; while little progress was found on the bouncing a ball task sequence.

Pupil 3 was a six year old girl with Down's Syndrome, who was very shy and withdrawn. She was very small in stature and exhibited an awkward gait due to hip displacement difficulties. She had very high receptive and expressive language skills; however, she did not like to participate in any type of physical activity. As illustrated in Figure 3, instruction was begun on the target skills of running and tricycling; she made little progress on both these skills. Instruction on the control skill of walking up an incline resulted in clear increases in proficiency; however, again little progress was demonstrated on the control skill of swinging on a rope.

Pupil 4 was an eight year old boy with very good expressive and receptive language. He exhibited very good physical co-ordination but was often withdrawn during class time. As presented in Figure 4,

Figure 1: Individual progress of pupil 1.

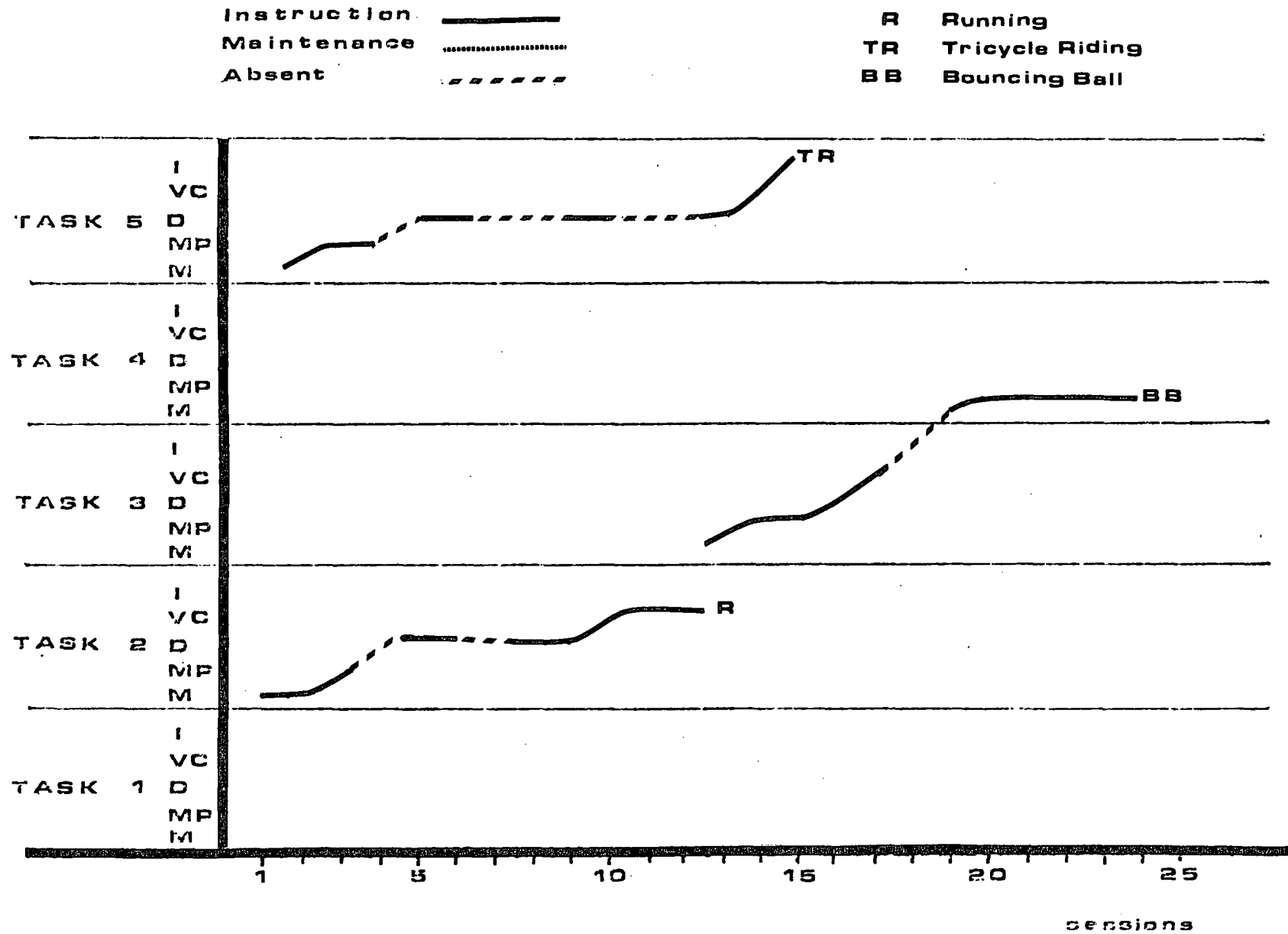


Figure 2: Individual progress of pupil 2.

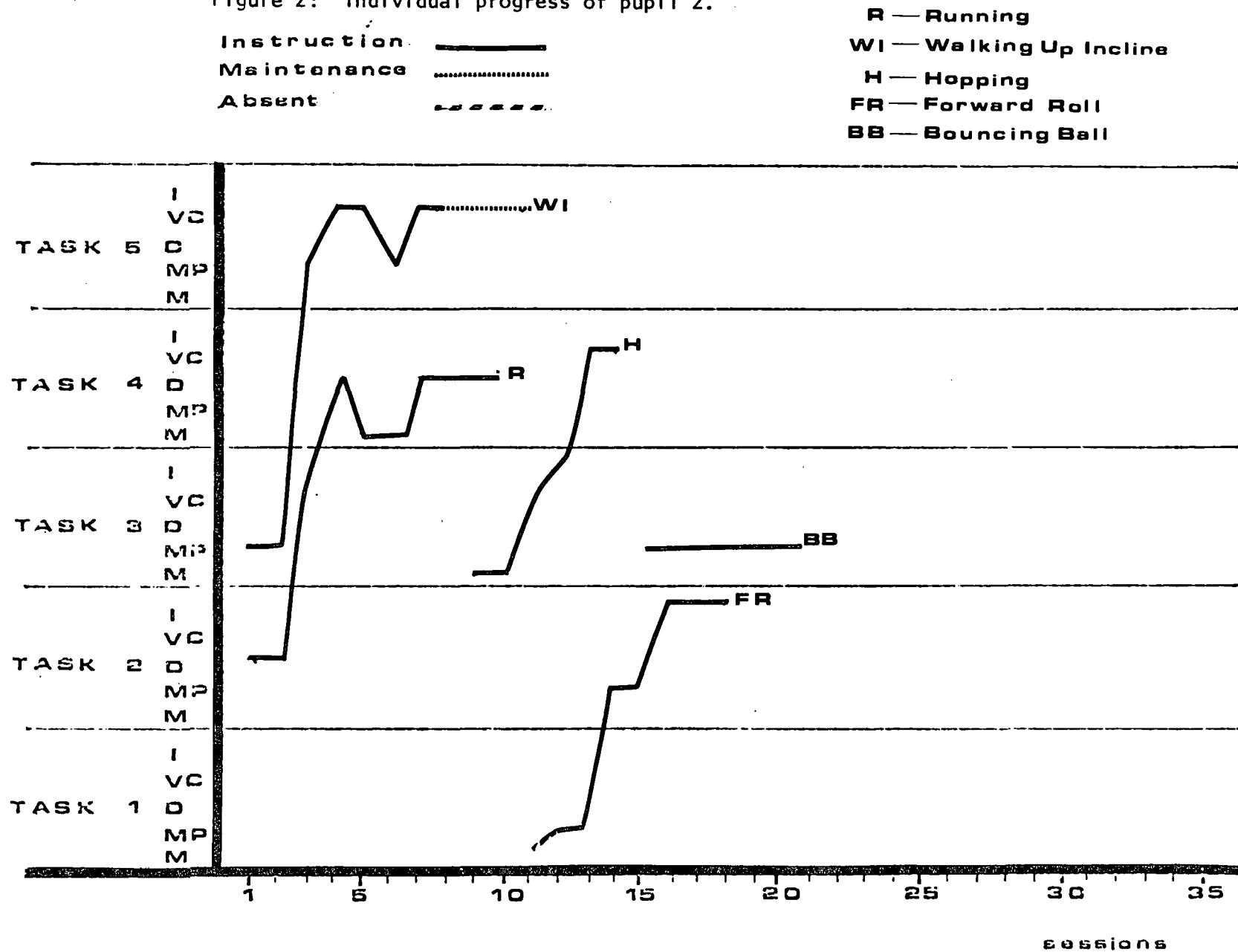


Figure 3: Individual progress of pupil 3.

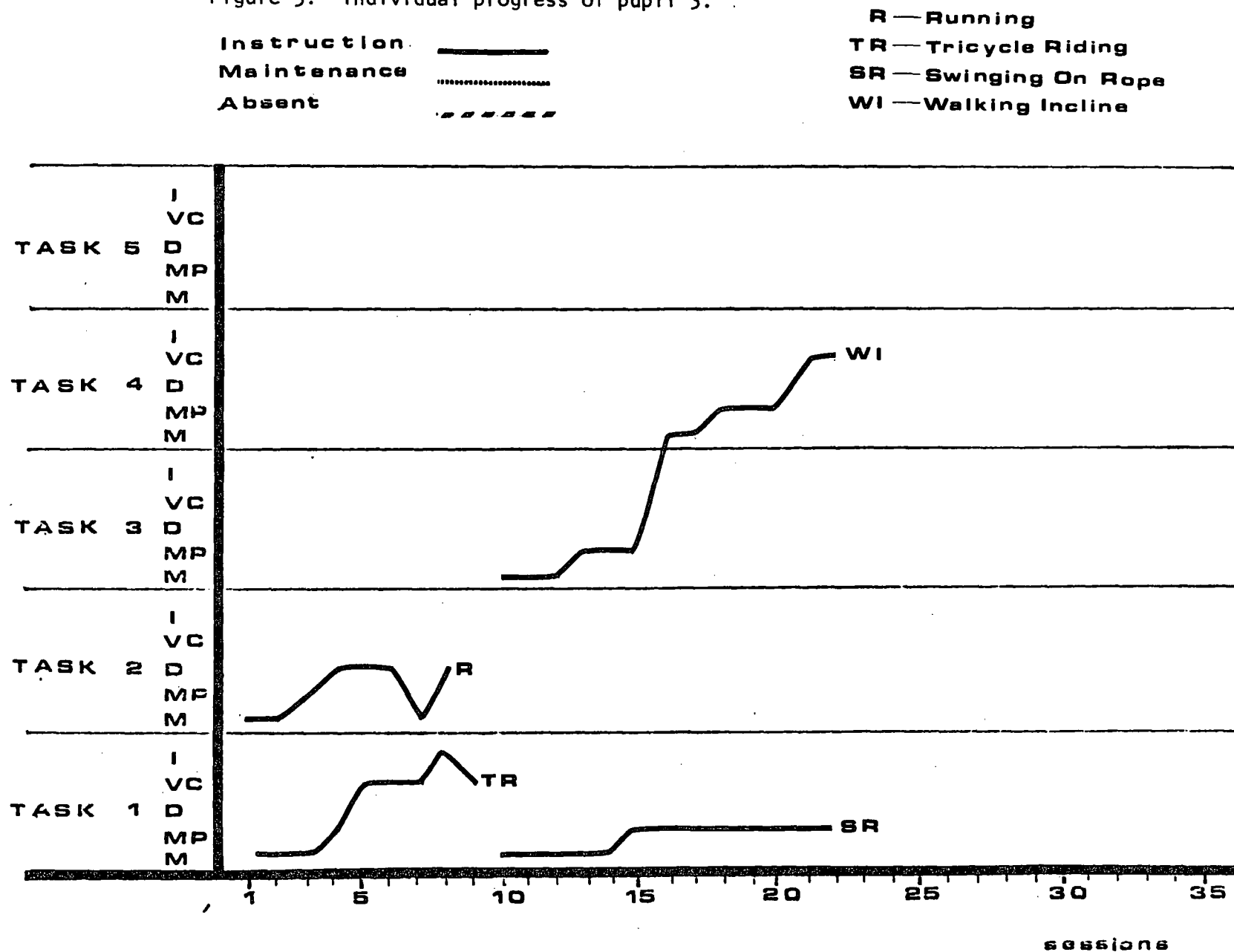
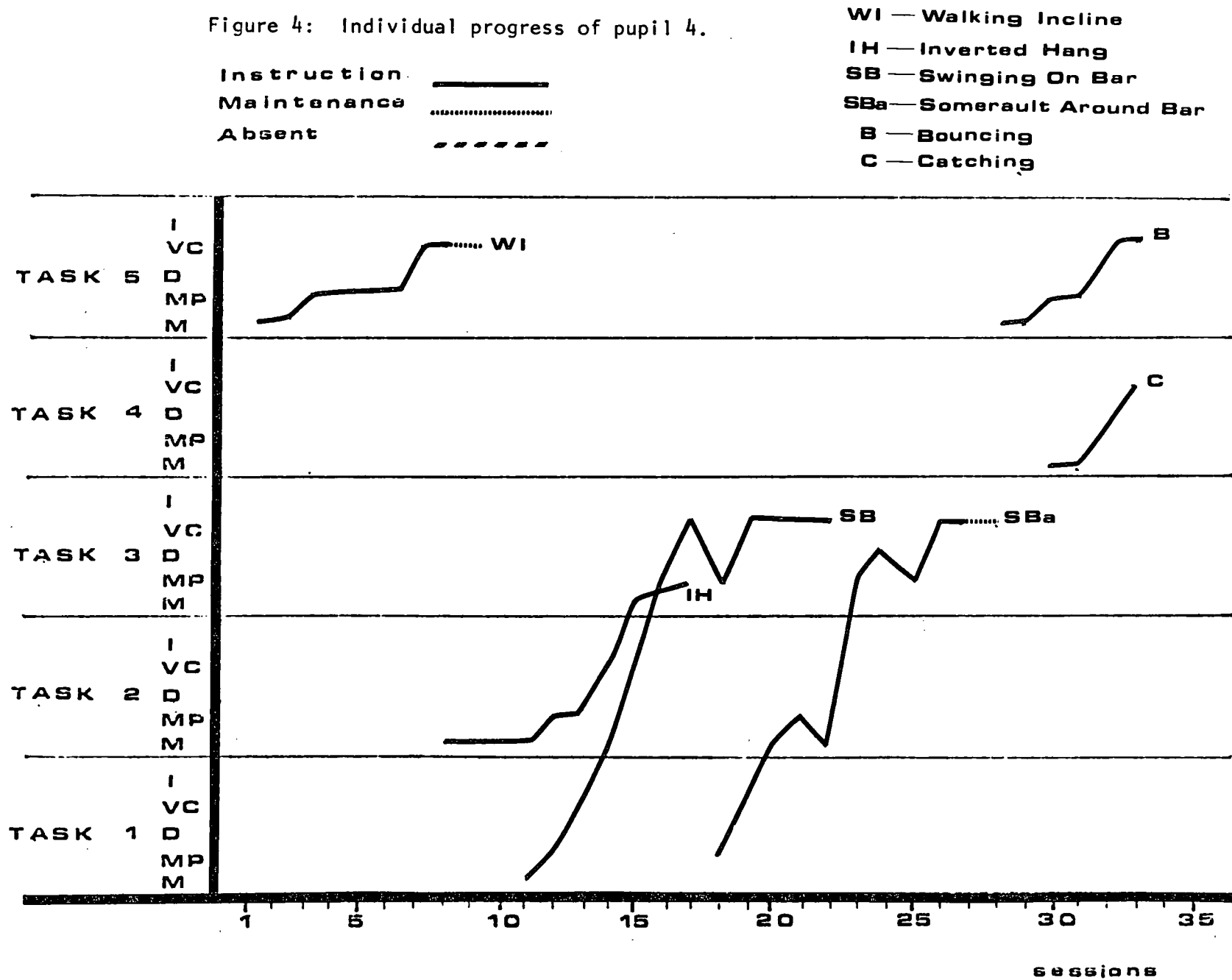


Figure 4: Individual progress of pupil 4.



instruction was started on only the walking up an incline target skill which resulted in the reaching of independent performance of that skill. The onset of instruction in swinging on a bar, inverted hanging from a bar, and somersaulting around a bar resulted in clear improvements in performance on all of these skills. The onset of instruction on the control skills of bouncing a ball and catching resulted in some progress.

Pupil 5 was an eight year old boy who had good receptive skills but poor expressive language skills. He enjoyed physical activities and was judged to be very co-ordinated by his teacher. His individual student profile results indicated that he had acquired most of the PREP play skills. As illustrated in Figure 5, he reached independent tummy riding on a scooter and backward rolling after a relatively short period of instruction. He demonstrated clear improvements in skill proficiency on the control skills of forward rolling and inverted hanging following the onset of instruction. Instruction on a new task sequence of bicycle riding again resulted in very clear increases in skill proficiency.

Pupil 6 was a six year old boy with no specific etiology for his developmental delay. He had adequate receptive language skills; however, he had difficulty paying attention for reasonable lengths of time. As indicated in Figure 6, initial instruction began on the throwing and forward roll task sequences. He attained the criterion level on the throwing sequence and made some progress on the forward roll sequence. The onset of instruction on the control skill of backward roll again resulted in some progress after an initial period of little learning. Instruction on the inverted hang and somersaulting around a bar task

Figure 5: Individual progress of pupil 5.

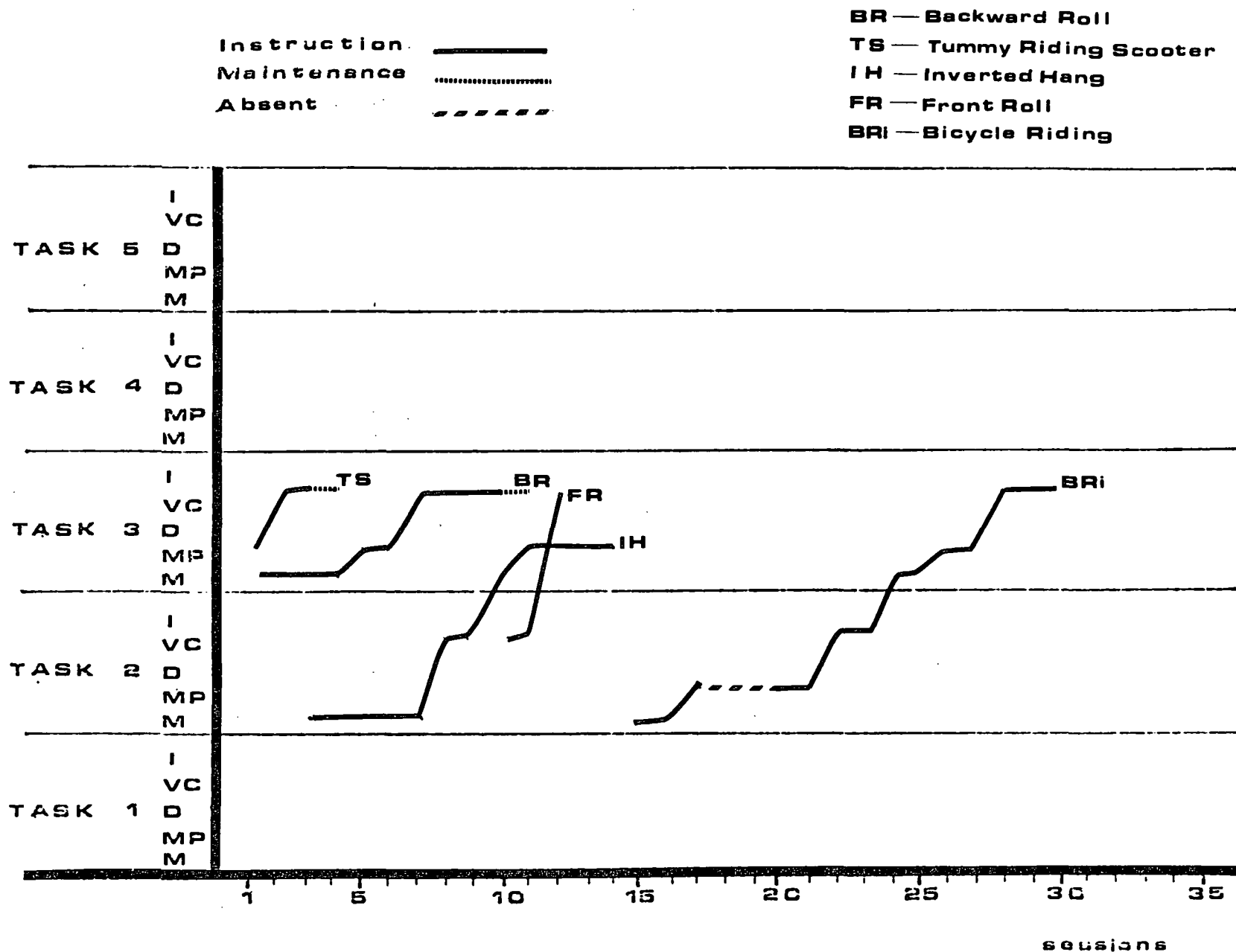
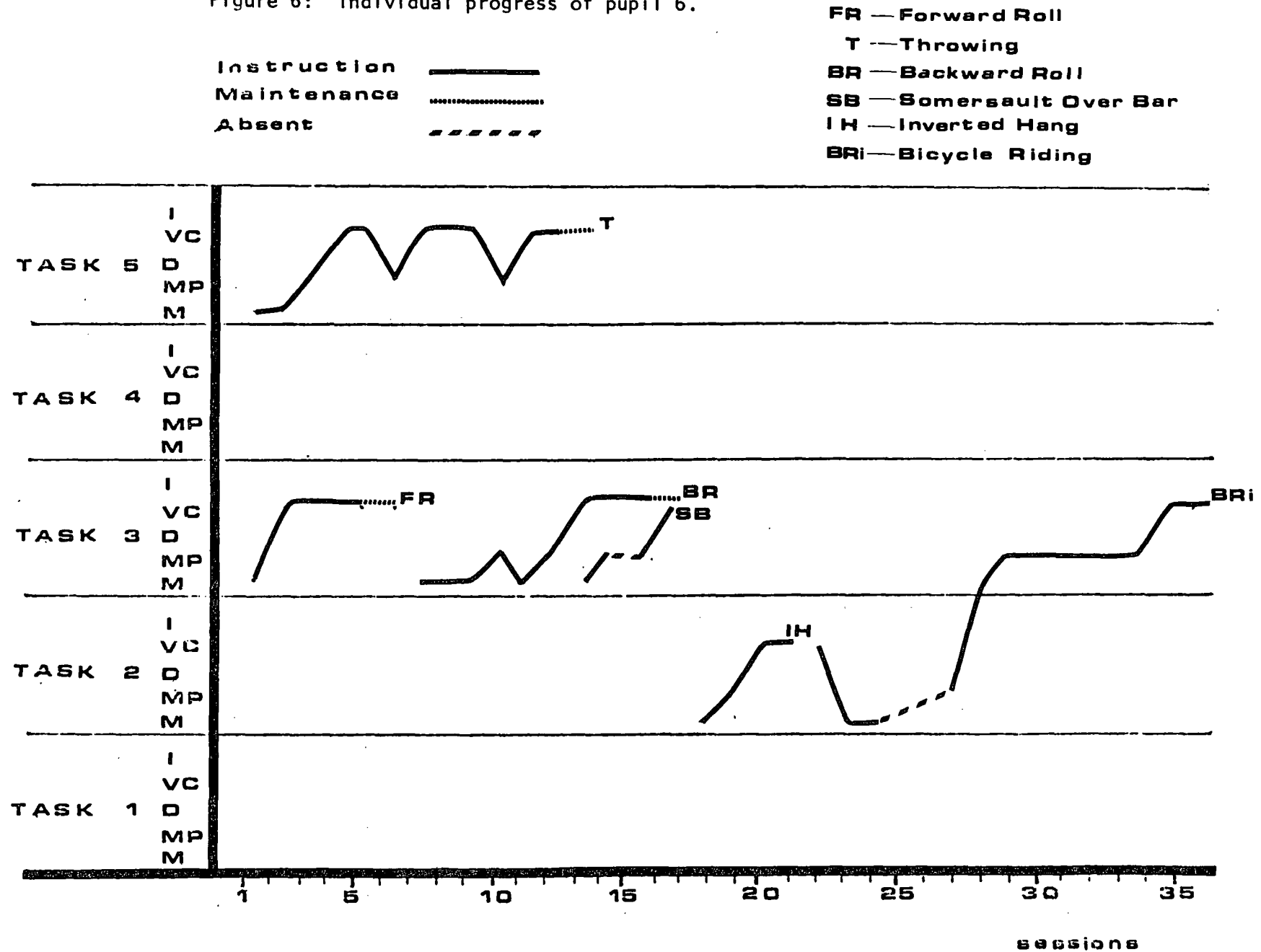


Figure 6: Individual progress of pupil 6.



sequences resulted in relatively fast improvement in both skills. The final skill that he was taught was based on a new task sequence of bicycle riding; again clear improvements on this skill were noted.

Pupil 7 was a seven year old boy who the teacher reported was very uncoordinated. Instruction was prescribed on the target skills of running, swinging on a rope and walking up an incline. As illustrated in Figure 7, the criterion level for the walking up an incline target sequence was reached in approximately six sessions; however, little improvement was demonstrated in the other two target skills. This pupil was rather withdrawn and was on medication which seemed to slow down his actions. The onset of instruction on the control skills of descending stairs and forward roll resulted in clear increases in skill proficiency; however, instruction on the catching, backward roll, and swinging on a bar tasks resulted in minimal performance changes.

Pupil 8 was a twelve year old boy who was overweight and previously had been very reluctant to participate in physical education activities. As presented in Figure 8, instruction was initiated on the jumping down task sequence at the lowest level of task step one; very clear increases in skill proficiency were made. The second skill taught was the ascending the ladder task sequence which also resulted in clear performance changes. Instruction on the control skills of swinging on a rope and pulling a wagon also resulted in very positive changes in performance.

Pupil 9 was a ten year old girl who had high receptive and expressive language skills. She was well skilled in most of the PREP play skills. As illustrated in Figure 9, she made good performance gains on the forward and backward rolling skill sequences following

Figure 7: Individual progress of pupil 7.

R — Running
 SR — Swinging On Rope
 WI — Walking Up Incline
 C — Catching
 DS — Descending
 SB — Swinging On Bar
 FR — Forward Roll
 BR — Backward Roll

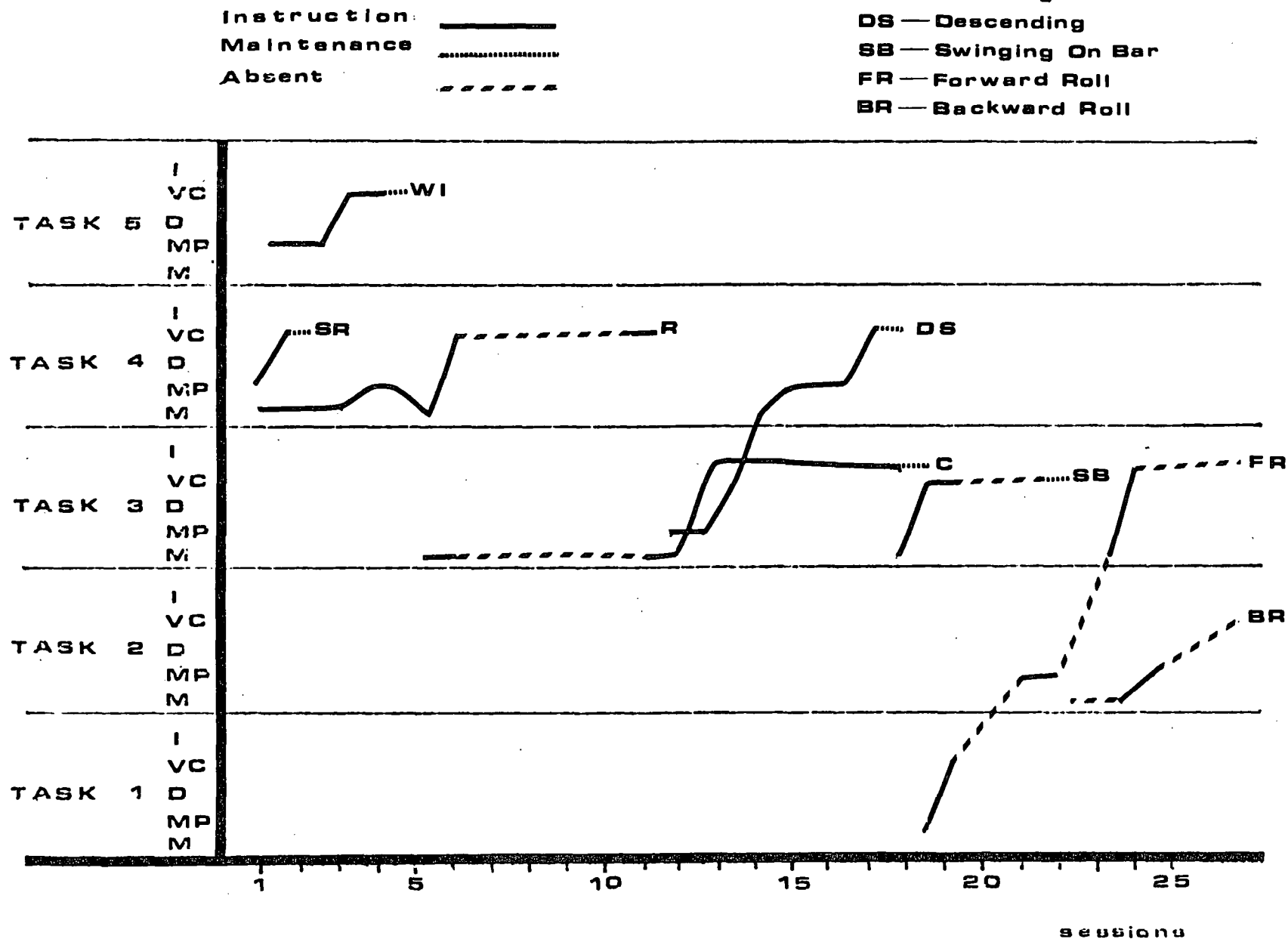


Figure 8: Individual progress of pupil 8.

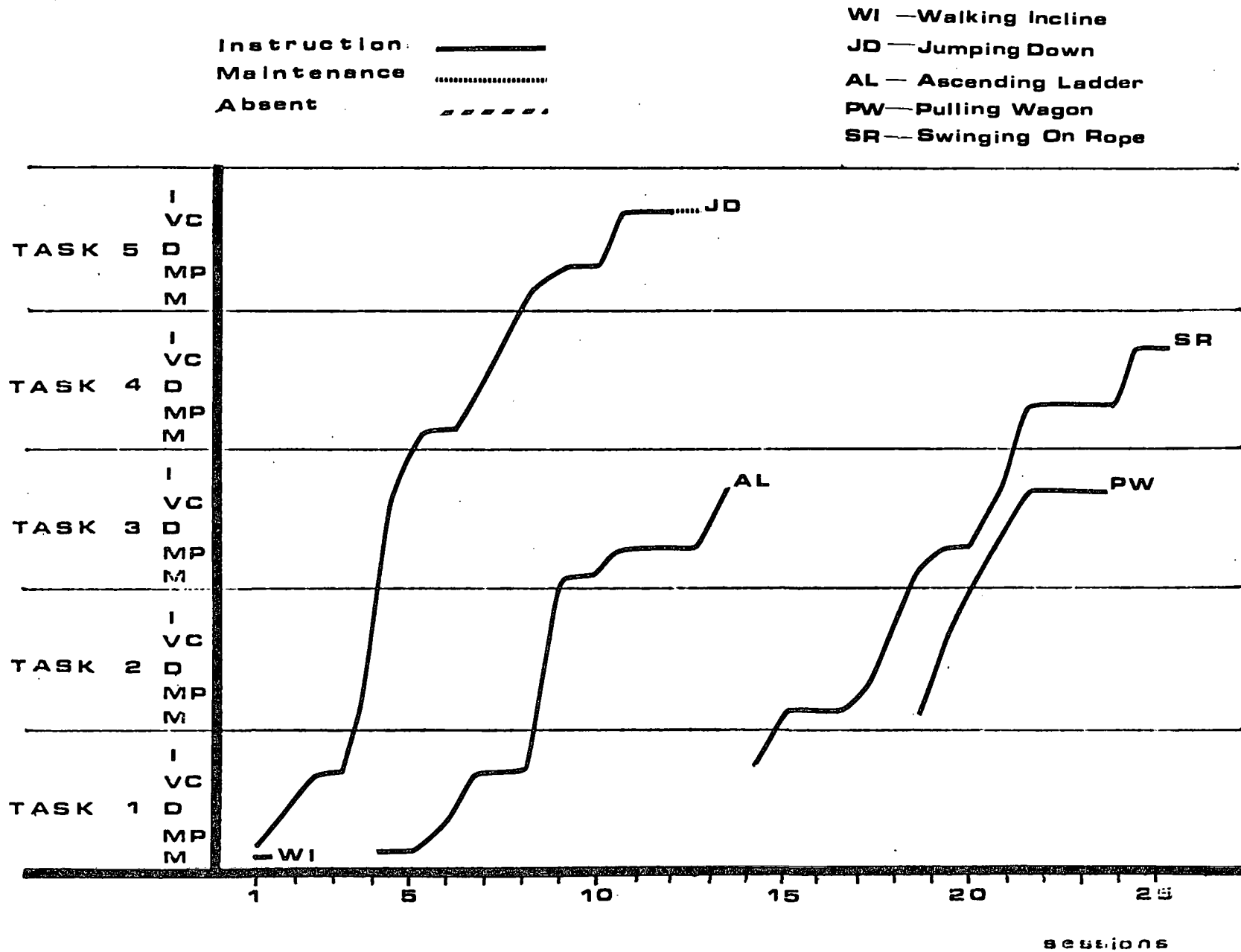
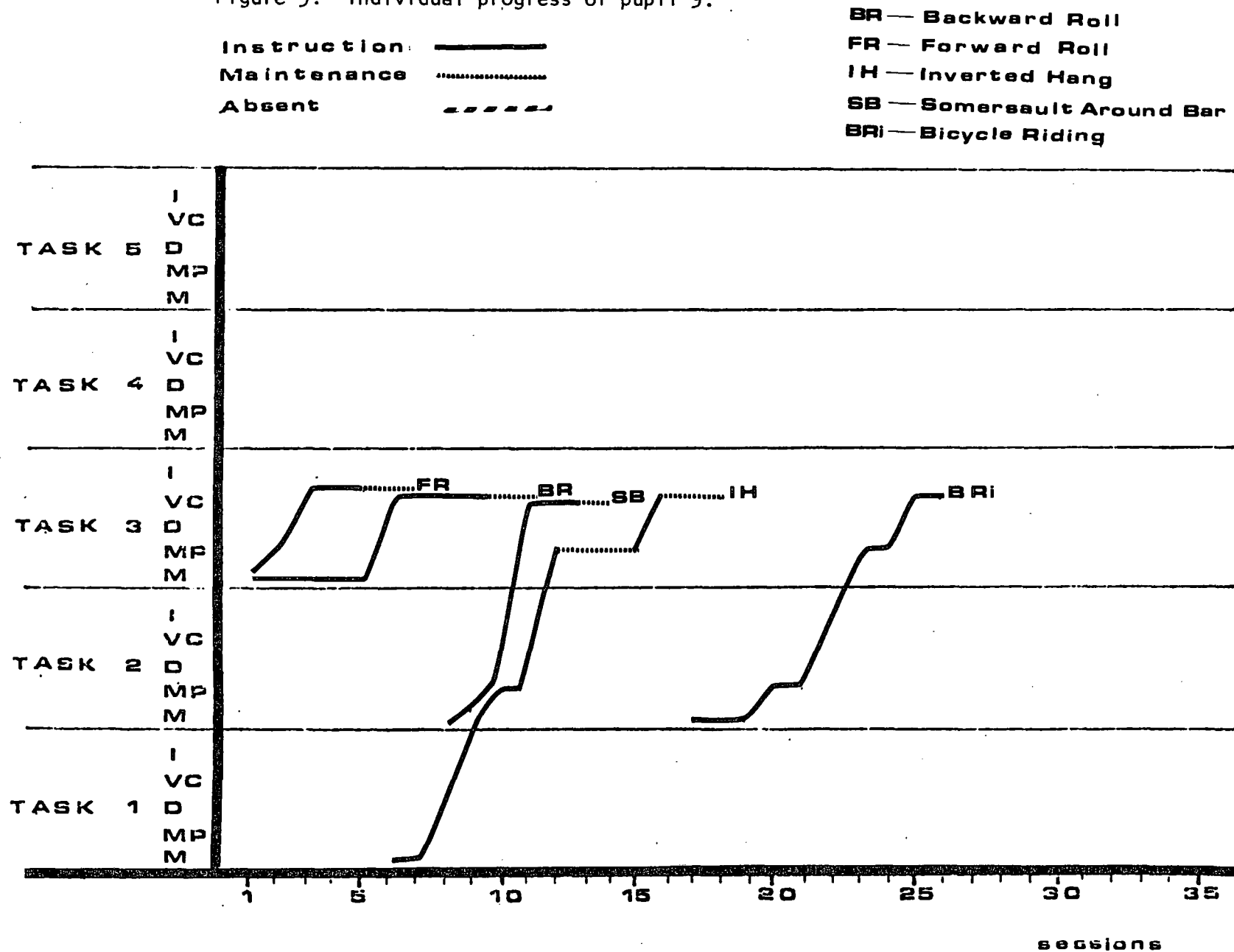


Figure 9: Individual progress of pupil 9.



relatively short periods of instruction. No control skills were available for her; however, clear performance increases were recorded when instruction on the somersaulting around a bar, inverted hanging and bicycle riding task sequences was initiated.

Pupil 10 was a five year old boy who had Down's Syndrome. He understood verbal instructions very well; however, he could be very stubborn at times. Instruction began on the sitting on a scooter and descending stairs task sequences; improvements in skill proficiency followed the onset of instruction. Very clear gains in skill proficiency were demonstrated on the bouncing a ball task sequence following the initiation of instruction. The relatively minimal progress on the inverted hang sequence might have been due to his diminutive size and the fact that his legs were too small to squeeze the bar. On the control skills of walking an incline and hopping, he made clear progress on the first skill but very slow minimal progress on the hopping skill.

Avonmore Classes

Pupil 11 was a seven year old boy with Down's Syndrome who had a relatively good receptive vocabulary. He made little progress on the initially prescribed task sequence of jumping down; however, his skill in hopping improved but then plateaued so it was placed on maintenance. Initiation of instruction on the control skill of ascending a ladder resulted in clear gains in performance; however, little progress was observed on the control skill of descending stairs.

Pupil 12 was another seven year old boy who exhibited a short attention span and became easily frustrated on difficult tasks. The performance curves for this pupil are illustrated in Figure 12 and they reflect little improvement on either the initial target skills or the

Figure 10: Individual progress of pupil 10.

Instruction —————
 Maintenance
 Absent - - - - -

SS Sitting On Scooter
 DS Descending Stairs
 BB Bouncing Balls
 IH Inverted Hang
 H Hopping
 WI Walking Incline

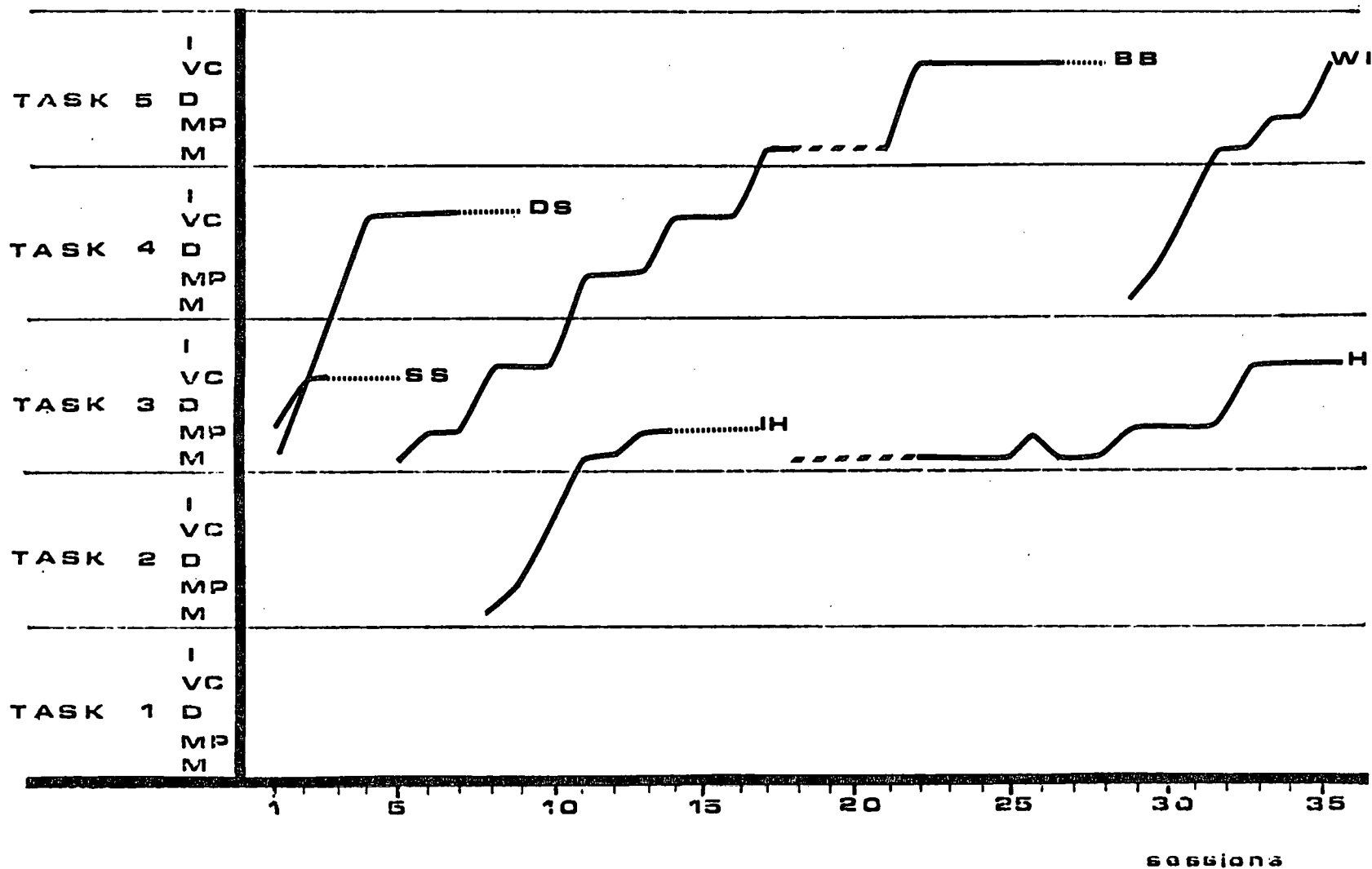


Figure 11: Individual progress of pupil 11.

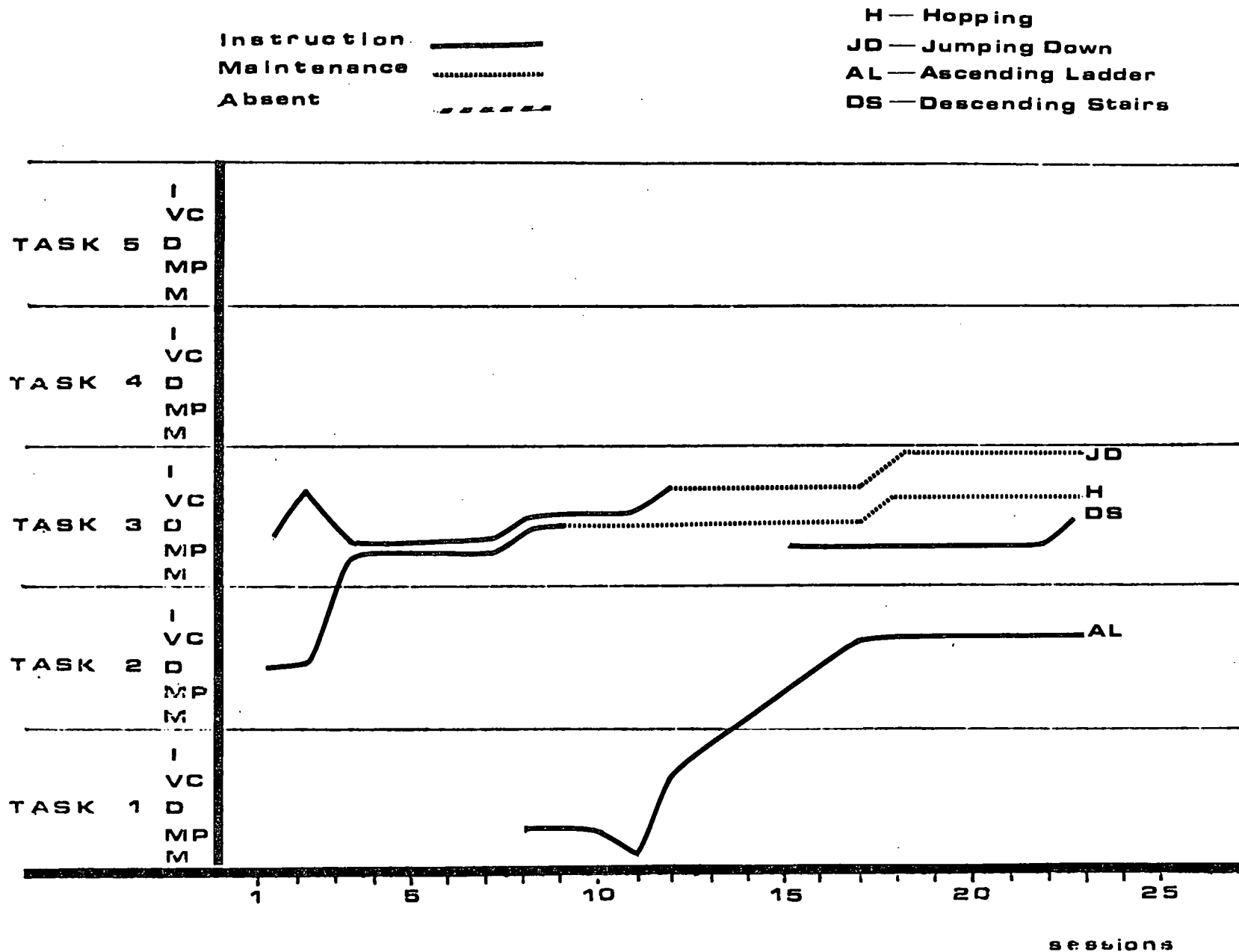
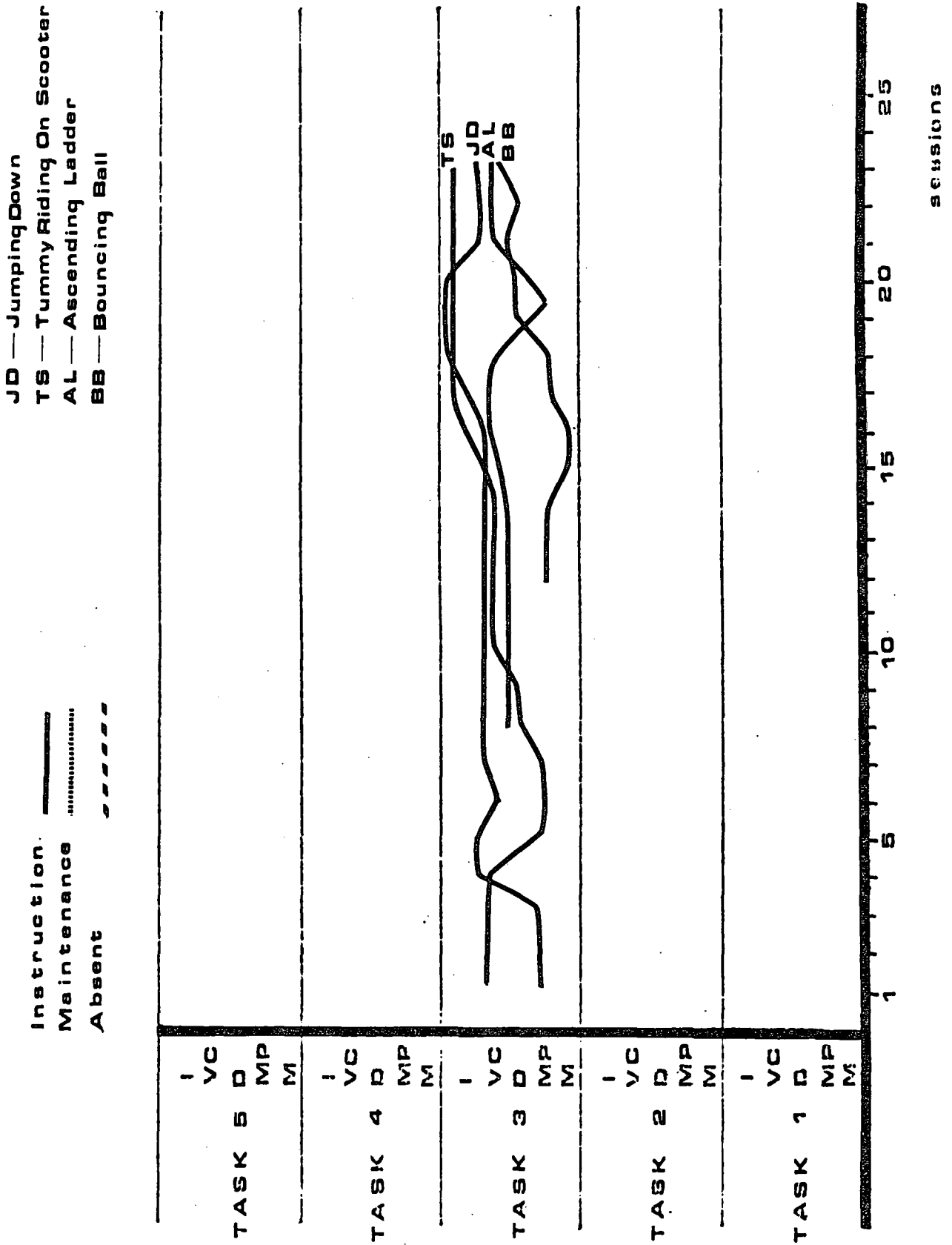


Figure 12: Individual progress of pupil 12.



control skills. The teacher believed this pupil was capable of improvement in these skills; however, he was very uncooperative throughout the implementation period and this behavior is reflected in the clearly flat performance curves.

Pupil 13 was a nine year old girl with Down's Syndrome who has had congenital heart difficulties and kidney problems. The teacher considered her to be a very low functioning child; furthermore, she had impaired vision. As illustrated in Figure 13, she was absent nine of the twenty-three instruction sessions. Again, no real progress was noted for the initial or control target skills. The teacher believed that a more concentrated program would be required if improvement was to be seen.

Pupil 14 was a seven year old girl with Down's Syndrome who needed surgery for a congenital heart condition. Her heart condition coupled with the short period in which she was in the program hindered her progress. As noted in Figure 14, no progress resulted from the instruction on the initial task sequence of somersaulting around a bar; however, a clear increase in proficiency was noted on the control skill of ascending a ladder when instruction began but little progress in ball bouncing was found.

Pupil 15 was a seven year old girl with Down's Syndrome who had good receptive language skills. Instruction began on the swinging on a rope and hopping target skills and, as illustrated in Figure 15, she made clear gains in skill proficiency in both target skills. However, after the sixth instruction session, no progress in skill proficiency was made. Again, without instruction no improvement was recorded during the control period; however, with the onset of instruction only

Figure 13: Individual progress of pupil 13.

R — Running
 JO — Jumping Over
 SR — Swinging On Rope
 T — Throwing

Instruction —————
 Maintenance
 Absent -----

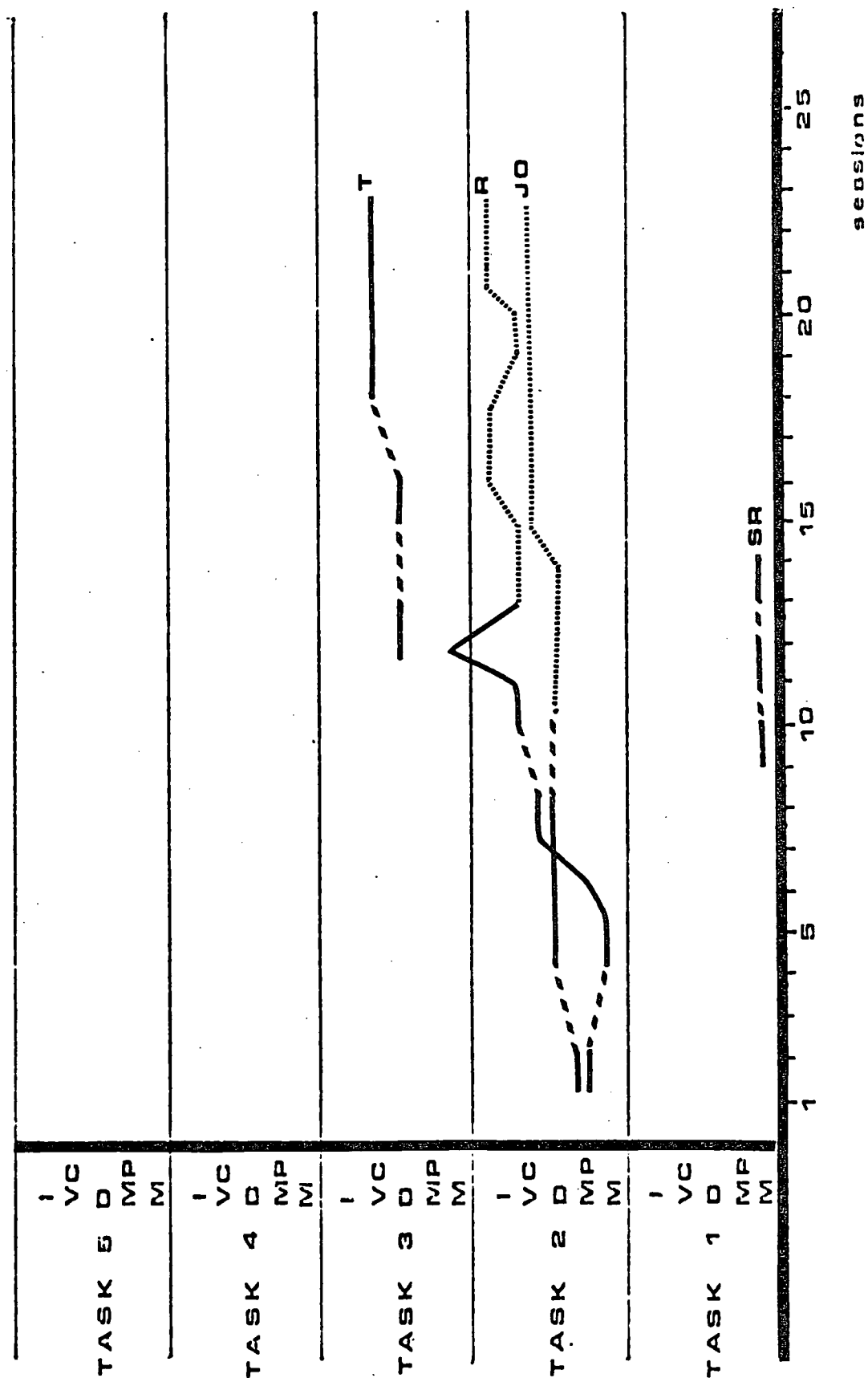


Figure 14: Individual progress of pupil 14.

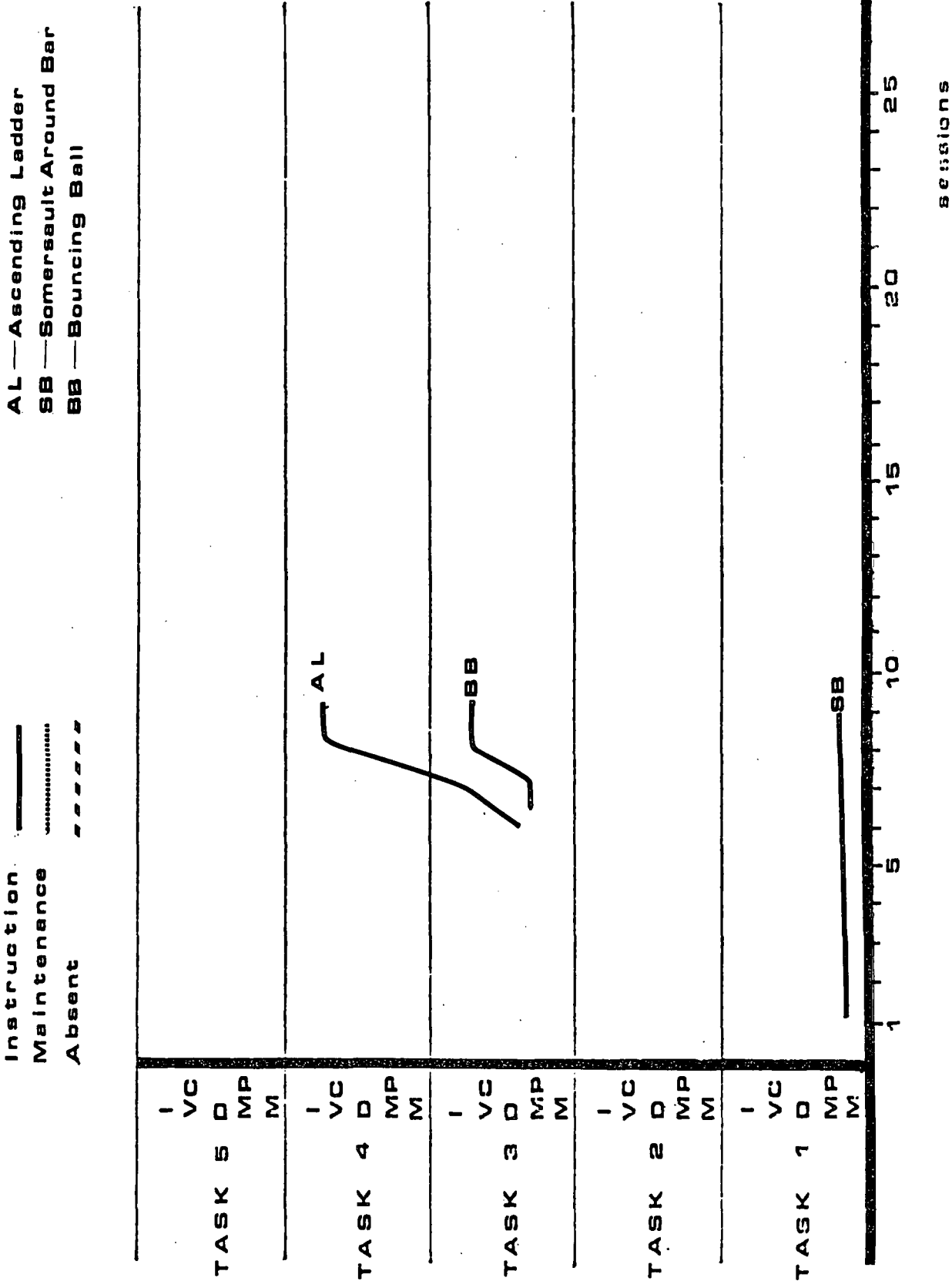
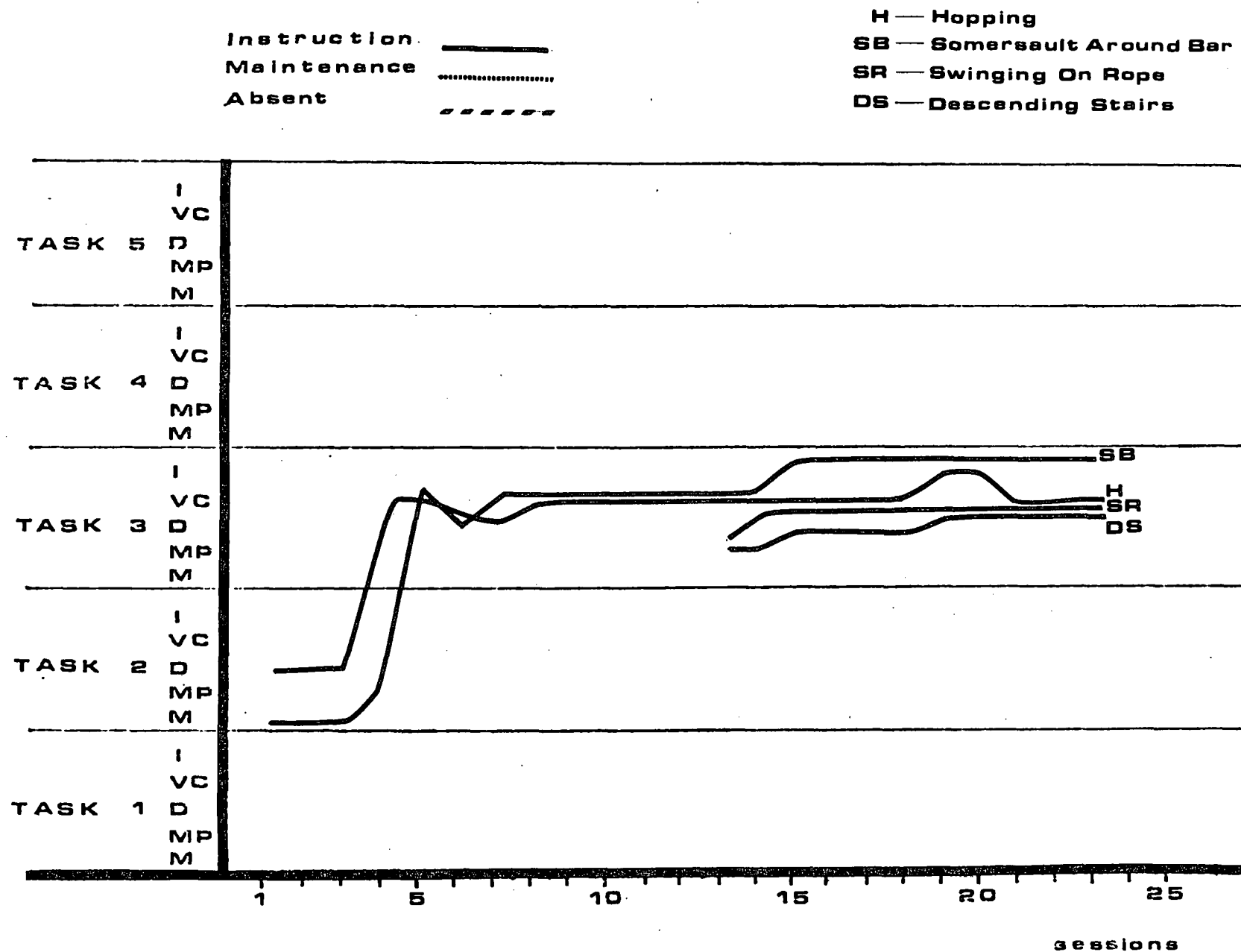


Figure 15: Individual progress of pupil 15.



minimal improvement was noted on the somersaulting around a bar and descending the stairs control skills.

Pupil 16 was a nine year old boy with Down's Syndrome who had very good receptive language. He had acquired most of the basic play skills and he was satisfied with the functional level of skill he had achieved. As illustrated in Figure 16, this adequate level of performance coupled with his short attention span and limited period in the program resulted in improvement only on the scooter riding task sequence and not on the ascending the ladder nor the control skill of hitting with a bat.

Pupil 17 was a six year old boy with a physical disability, spastic diplegia. He was unable to stand without assistance and the target skills in the PREP Program were not appropriate for him. As noted in Figure 17, no progress was recorded on the swinging on a rope task sequence but some improvement in descending stairs was found. The forward roll control skill resulted in no improvements.

Pupil 18 was a six year old boy who was extremely clumsy. He was enrolled late in the program and was absent on many occasions which might account for his lack of and minimal progress on the swinging on a rope and descending a ladder task sequences that are presented in Figure 18.

Pupil 19 was an eight year old girl with Down's Syndrome who was very small in stature. She was absent on a number of occasions and a lack of available equipment hindered her progress on the initial target skills of swinging on a rope and hopping. As illustrated in Figure 19, she made little progress on the control skill of bouncing a ball following the onset of instruction; however, some progress was

Figure 16: Individual progress of pupil 16.

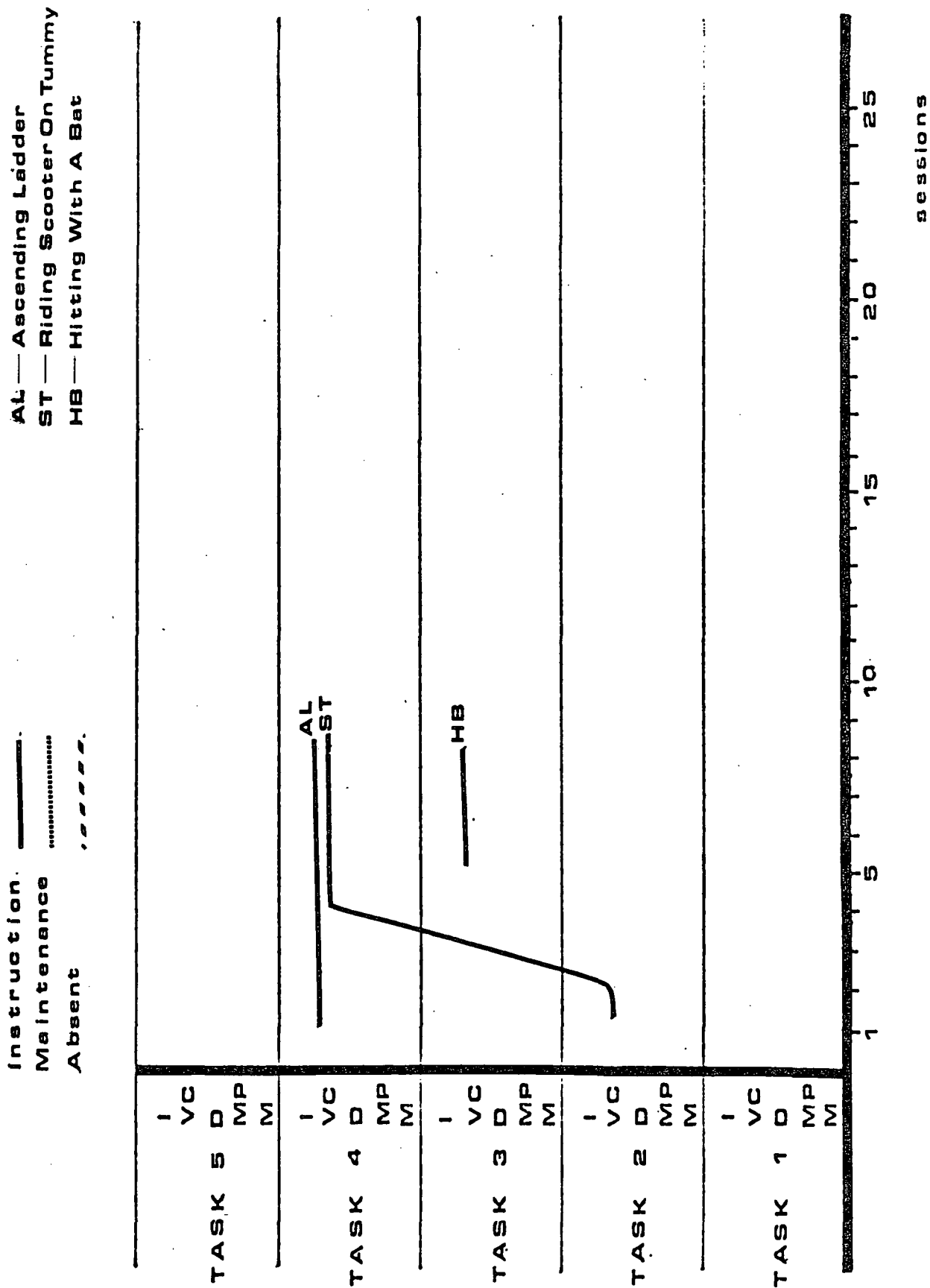


Figure 17: Individual progress of pupil 17.

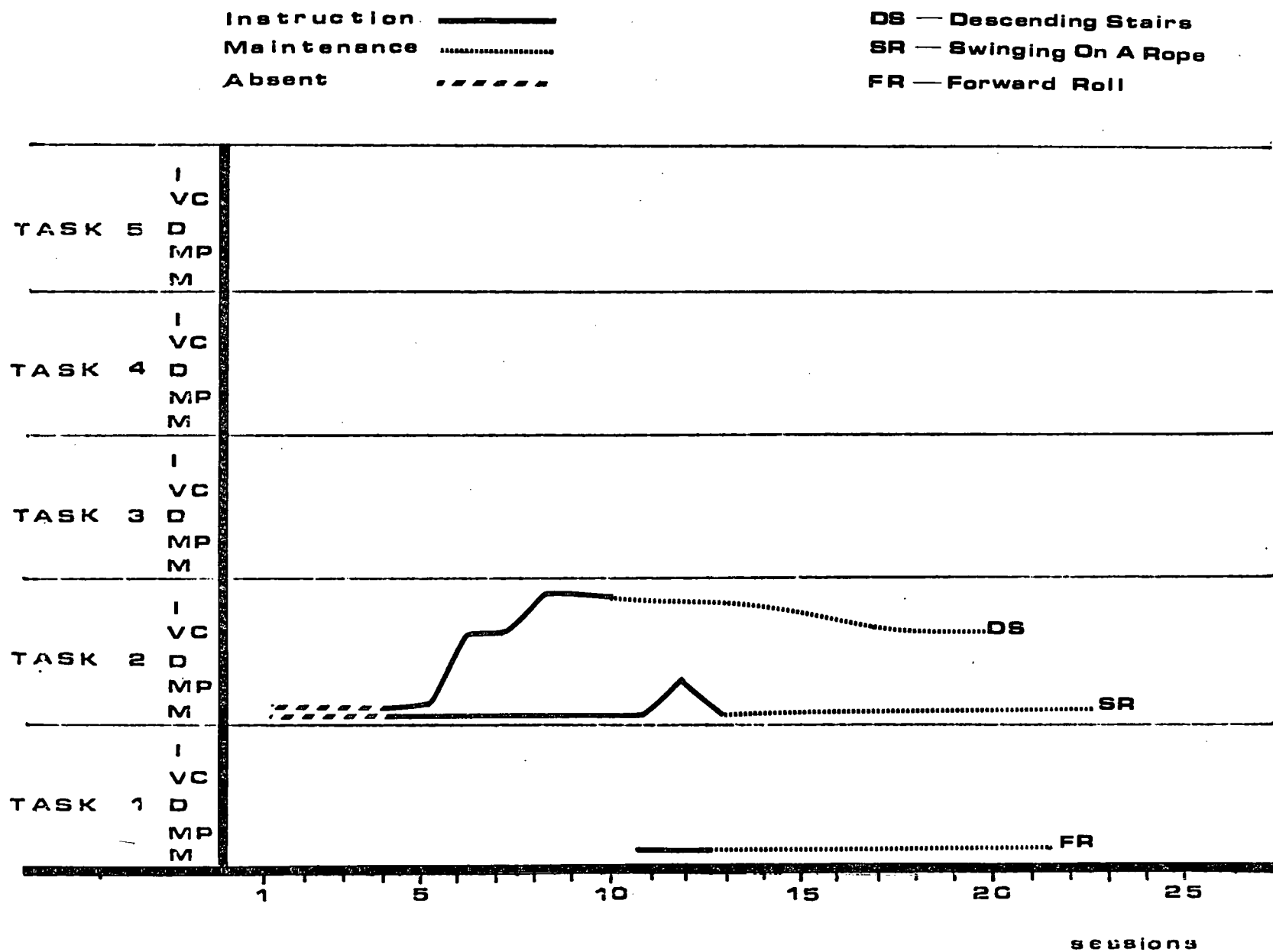


Figure 18: Individual progress of pupil 18.

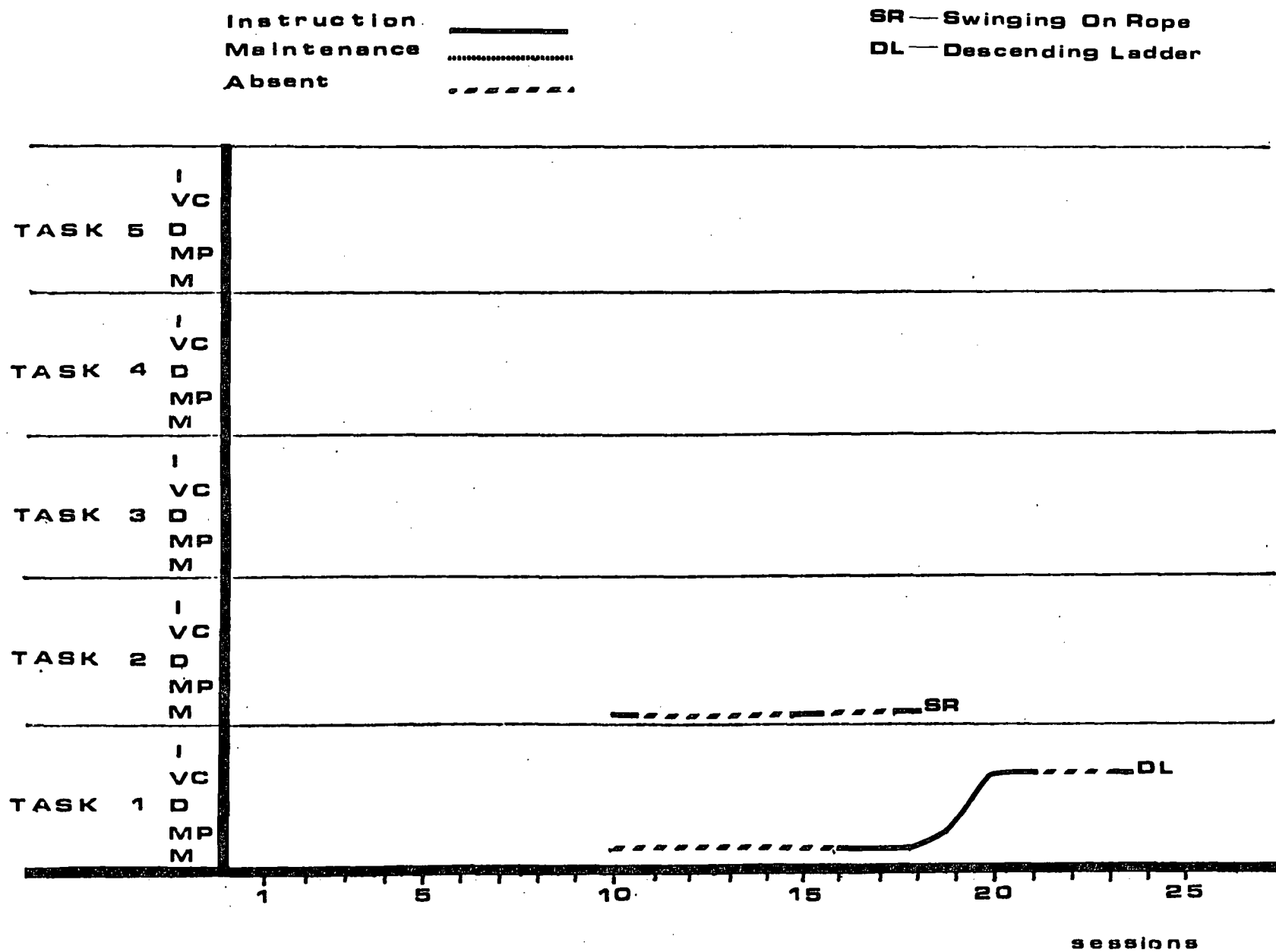
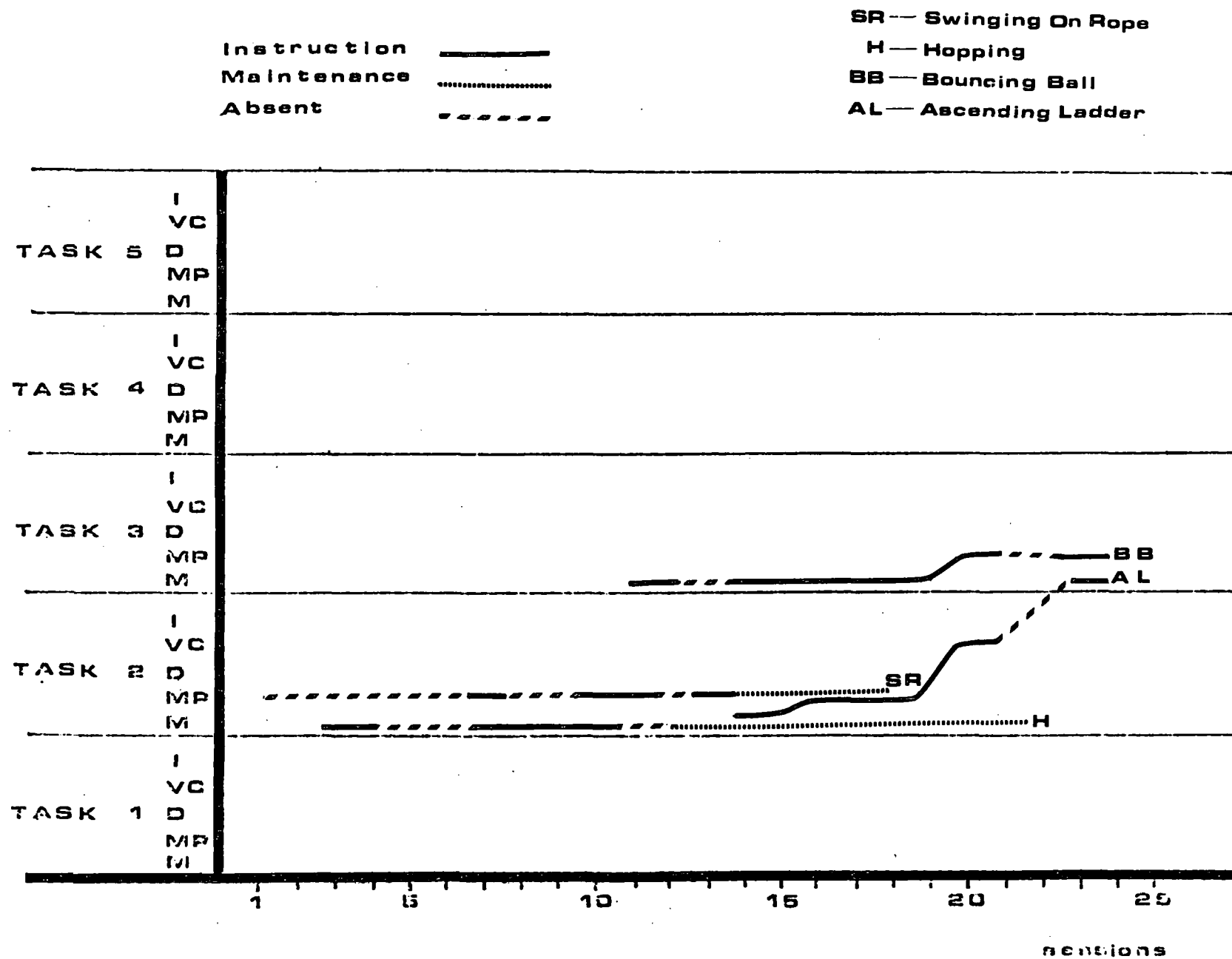


Figure 19: Individual progress of pupil 19.



achieved when instruction began on the ascending a ladder task sequence.

Pupil 20 was a six year old boy who received instruction on four target skills throughout the implementation period. As illustrated in Figure 20, instruction was initiated on the jumping down and swinging on a rope target skills. Little progress was made on the swinging on a rope task sequence which was probably due to difficulties with the climbing equipment as it was in only one of the two gymnasiums used. Relatively little progress was made on the jumping down task sequence for the first six instruction sessions; however, clear skill performance changes are evident over the next four sessions. A relatively high performance level in jumping down was maintained for the rest of the program period. The positive effects of the initiation of instruction can be clearly noted in the bouncing a ball and forward roll progress curves; especially considering that there was absolutely no changes in performance during the control period.

Pupil 21 was a seven year old girl who missed many classes and ultimately left the program before it ended. As illustrated in Figure 21, she made clear improvement in the jumping down task sequence and considerable increases in proficiency on the ascending a ladder task sequence, however; the short time she was in the program prevented the introduction of any control skills.

Pupil 22 was a six year old girl who did not understand English. Her language difficulties and a short attention span hindered her progress. She received instruction on three target skills; as noted in Figure 22, instruction was initiated on tricycle riding and jumping down. Little improvement was found on the jumping down sequence after a small initial improvement. Considering the number of days this child

Figure 20: Individual progress of pupil 20.

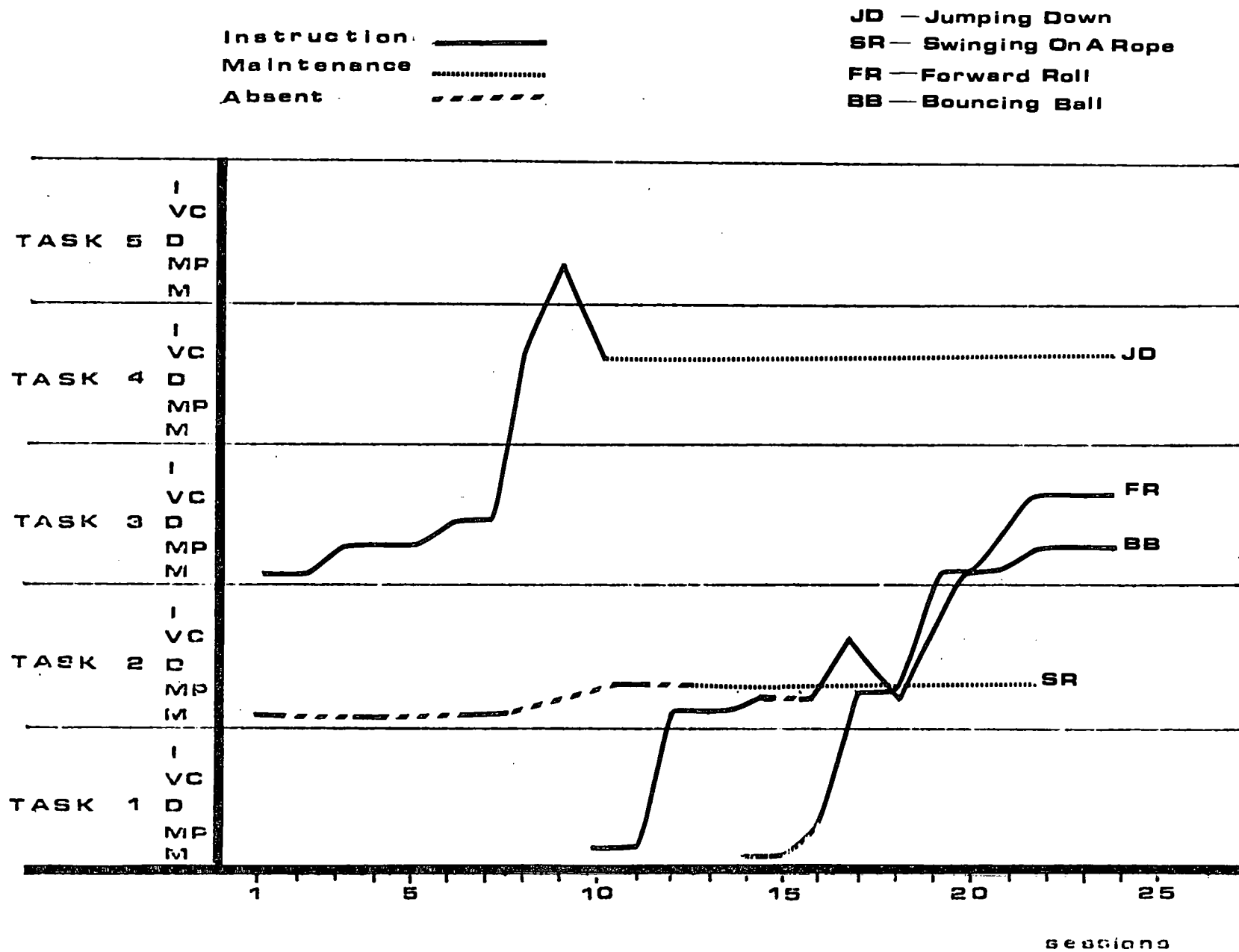


Figure 21: Individual progress of pupil 21.

Instruction: ————
 Maintenance:
 Absent: - - - - -

JD — Jumping Down
 AL — Ascending Ladder

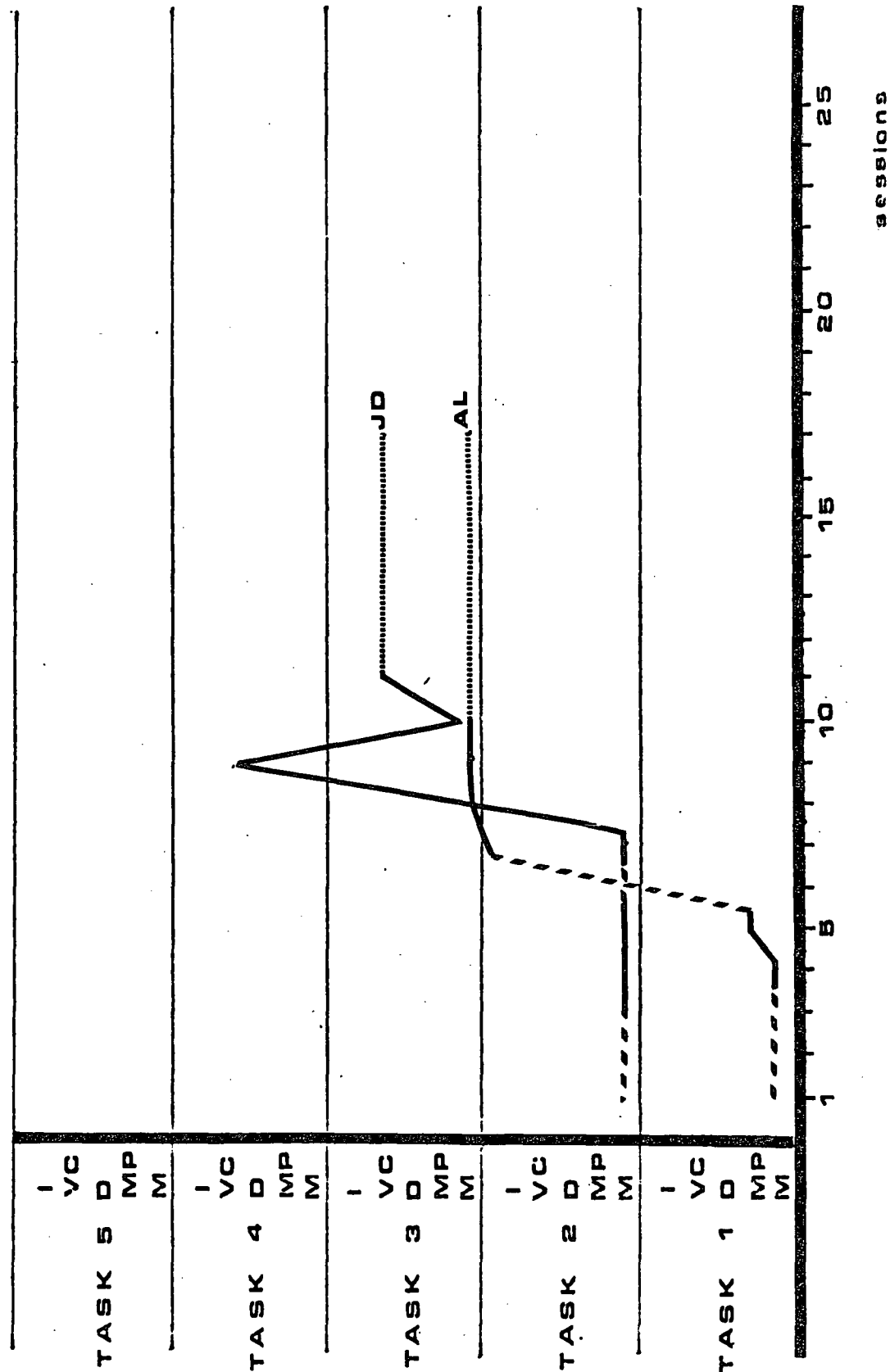
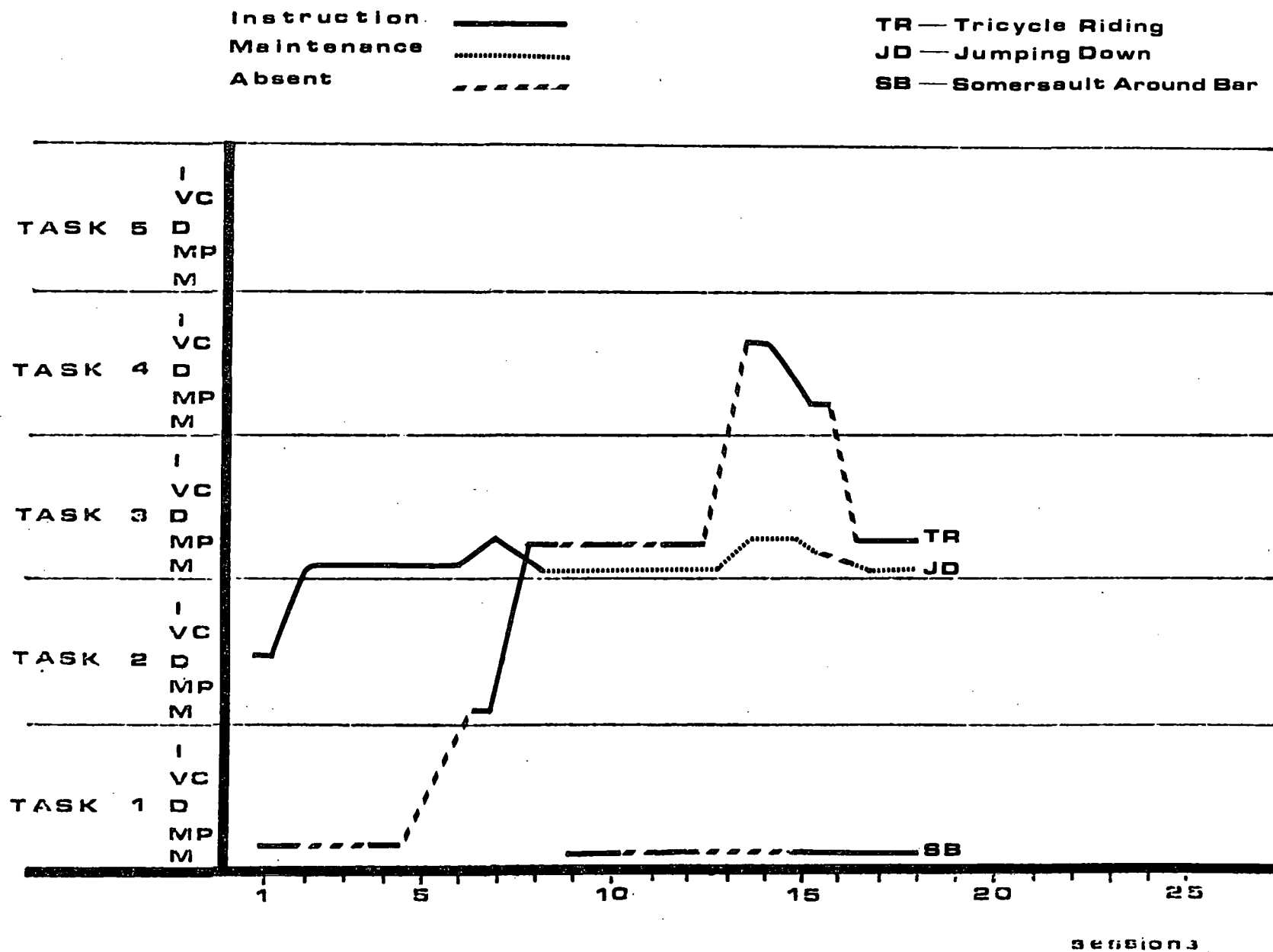


Figure 22: Individual progress of pupil 22.



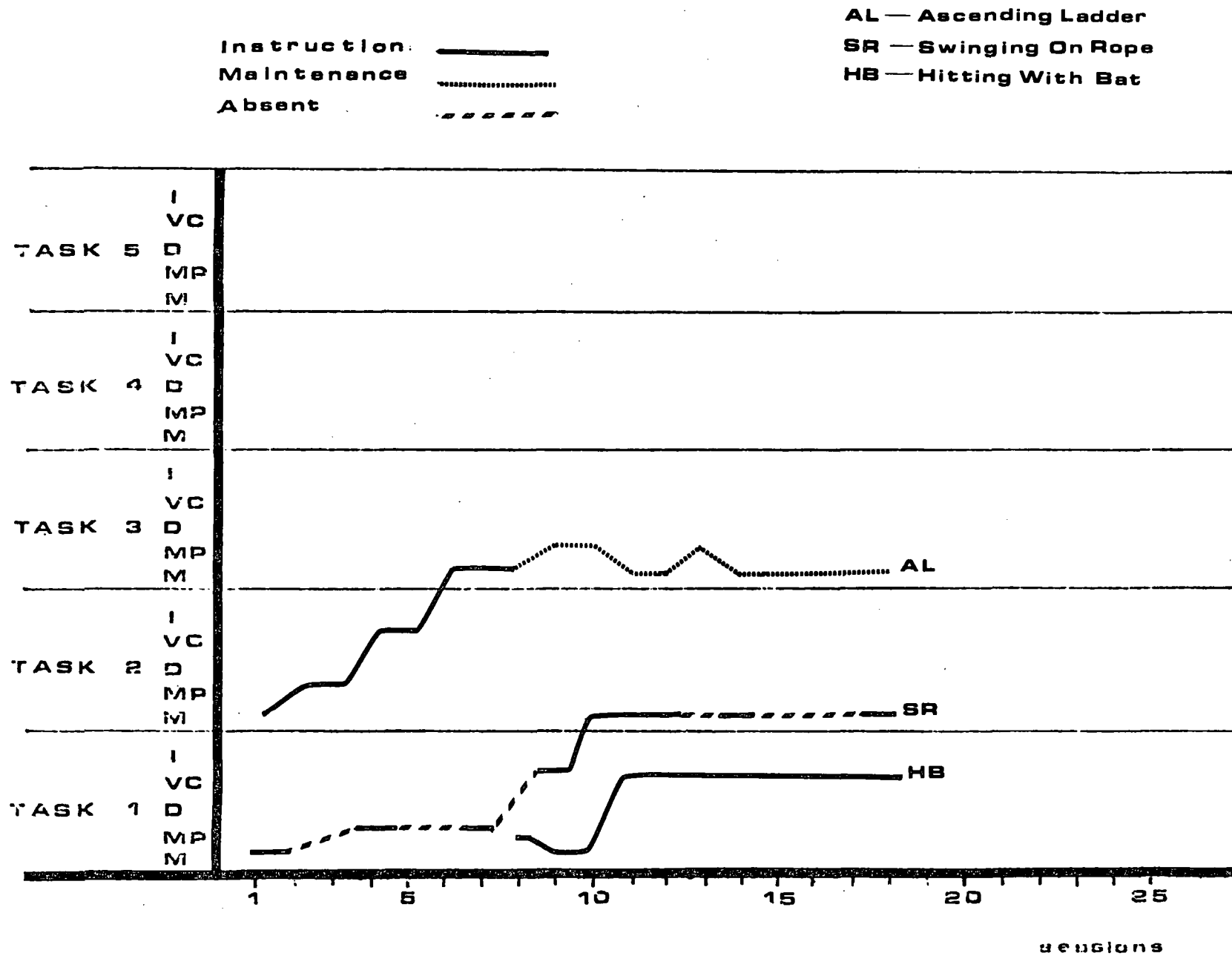
was absent and the periodic lack of a tricycle in the playroom, considerable progress was made on the riding of the tricycle task sequence. The control skill of somersaulting around a bar resulted in no performance changes during six instructional sessions.

Pupil 23 was a seven year old boy with Down's Syndrome who did not participate in the program, except with the direct assistance of the teacher. As illustrated in Figure 23, some improvement was noted on the swinging on a rope task sequence; however, the availability of the rope curtailed essential practice in the early stages of learning. Clear improvement in ladder climbing was noted during the first six sessions and then the skill was placed on maintenance. The initiation of instruction on hitting a ball with a bat resulted in little improvement on this skill.

Discussion of Pupil Progress

A number of factors underly these striking differences in pupil progress. As can be noted in Tables 1 and 2, the central challenge of teaching classes of moderately mentally handicapped children lies in the wide individual differences that exist in the cognitive, physical, social and emotional domains. To optimally meet these individual needs a teacher must sensitively employ a variety of instructional strategies. However, limitations of time, space, and equipment often limit the degree of success experienced by the pupils. The above program factors notwithstanding, overall it can be stated that nineteen of the twenty-two subjects (Pupil 7 was excluded due to his physical limitations) improved in at least one skill if a criteria for improvement is set at a minimum of one task step, that is, progress through four response prompting categories. Furthermore, fourteen of the twenty-

Figure 23: Individual progress of pupil 23.



two pupils improved on two or more of the play skills during the implementation period.

As was expected, in pupils for which control skills were monitored, little progress was evident prior to the onset of instruction; however, in many instances clear improvements in skill were made by the children when instruction was initiated. Likewise, the onset of instruction brought about clear gains in performance for some pupils even though the control skills were not monitored following the initial assessment which is congruent with the above pattern of improvement following instruction.

Finally, Table 4 summarizes the results of the inter-observer agreement scores between the Program Consultant and individual teachers and aides on the task steps that were randomly assessed throughout the program period. The average percentage agreement was 89.4 per cent while the range for the five teachers and aides was 80-100 per cent. These results provide considerable support for the consistency of the data collected.

Table 4 Inter-observer Agreement between Program Consultant and Individual Teachers and Aides on Task Step Levels Throughout the Program Period.

<u>Instructor</u>	<u>Percentage Agreement</u>
1	80
2	82
3	93
4	100
5	92
Average	<hr/> 89.4

Program Evaluation

The program evaluation section of this report will be presented under three major headings: a) Results of Structured Questionnaires, b) Report of the External Evaluator, and c) Overview of Program and Comments of the Program Consultant.

Results of Structured Questionnaires

A summary of the results of the eleven questions that the teachers completed on the PREP Program and Materials is presented in Table 5. It indicates that the teachers were in total agreement that the PREP Program Model was very effective; furthermore, they indicated that the Free Play Inventory, Individual Student Profile, Task Sequences, and Response Prompting Continuum were all valuable features of the PREP Program Model. The teachers agreed that the target skills and group play activities were generally appropriate; however, their less than enthusiastic response reflects the fact that the skill level of some of the children was above the highest task step on a number of target skills. The teachers agreed that the slide-tape packages were valuable; however, they indicated some concern with the recording procedures and especially with the time required to complete these procedures.

Table 5 Summary of Teacher's Answers to
Questions on the Effectiveness of
the PREP Program and Materials
(Percentage responding in
each category)

1. Effectiveness of the PREP Program Model:
a) not b) somewhat c) effective d) very (100)
2. Value of the Free Play Inventory:
a) not b) some c) valuable (100) d) very
3. Value of Individual Student Profile:
a) not b) some c) valuable (33) d) very (67)
4. Value of task sequences:
a) not b) some c) valuable (17) d) very (83)
5. Value of the response prompting continuum:
a) not b) some c) valuable d) very (100)
6. Appropriateness of the target skills:
a) not b) somewhat c) appropriate (83) d) highly
7. Value of the recording/monitoring procedures:
a) not b) some (33) c) valuable (50) d) very (17)
8. Time required for recording procedures:
a) excessive (33) b) great deal (67) c) moderate d) minimal
9. Appropriateness of group play activities:
a) inappropriate b) somewhat c) appropriate (66) d) highly (17)
10. Appropriateness of time available:
a) inappropriate b) appropriate (100)
11. Value of slide-tape packages:
a) not b) some (17) c) valuable d) very (83)

Table 6 summarizes the responses the teachers and aides gave to the four questions on the PREP Inservice Programs. The teachers indicated that the PREP written materials were valuable and the lectures and audio-visual materials used were very effective. All of them agreed that the four half-day training sessions was sufficient time for the inservice aspects of the program. These results are congruent with those present in Table 3, that were completed by the teachers following each inservice training session. They provide positive support for the value and effectiveness of the inservice training session.

Table 6 Summary of Teacher's Answers
to Questions on the PREP Inservice Programs
(Percentage responding in each category)

14. Effectiveness of lectures in explaining PREP Program:
a) ineffective b) somewhat c) effective d) very (100)
15. Effectiveness of audio-visual materials:
a) ineffective b) somewhat c) effective d) very (100)
16. Sufficiency of time spent on inservice training:
a) insufficient b) sufficient (100) c) more than
17. Value of written materials on PREP Program:
a) not b) some c) valuable (83) d) very (17)

Table 7 summarizes the results of the questions answered by the teachers concerning the Program Implementation aspects of the field test project. The highly favourable responses on all four questions indicate that the teachers were very pleased with the help they received from the Program Consultant. One of the teachers indicated that more time would have improved the results of the project.

Table 7 Summary of Teacher's Answers
to Questions on Program Implementation
(Percentage responding in each category)

19. Sufficiency of time of implementation period:
a) insufficient (17) b) sufficient (83) c) more than
20. Value of the Program Consultant:
a) not b) some c) valuable d) very (100)
21. Sufficiency of frequency/number of consultant visits:
a) insufficient b) sufficient (100) c) more than
22. Effectiveness of professional relationship:
a) not b) somewhat c) effective (7) d) very (83)

Table 8 summarizes the answers the teachers and aides gave in response to questions on the effectiveness of the PREP Program. The teachers definitely believed that the children made marked improvements in their motor skills. They also perceived that their teaching of motor skills improved due to their participation in the program; they also noted that the instructional strategies employed in PREP helped them in their teaching of other classes. They also reported improvements in social play skills among the children in their classes. There was general agreement that the PREP Program, with minor modifications, should be implemented in other schools.

Table 8 Summary of Teacher's Answers
to Questions on Program Effectiveness
(Percentage responding in each category)

25. Perceived improvement in teaching motor skills:
a) markedly (83) b) some (17) c) little d) more
26. Value of teaching skills learned for other classes:
a) very (50) b) helpful (50) c) little d) none
27. Perceived improvement of pupil's motor skills:
a) marked (100) b) some c) little d) none
28. Perceived improvement of pupil's social play skills:
a) marked (67) b) some (33) c) little d) none
29. Implementation of PREP Program in other schools:
a) included (67) b) not included c) modified first (33)

The next section of this report includes the report of the external evaluator of the project.

Appendix G includes the results of the inter-rating agreement procedures between the data recorded on the personal questionnaires and that obtained by the external evaluator. The average inter-rating agreement score was approximately 85%, however, it should be noted that items 5, 6, and 11 resulted in scores of 50, 50, and 33 per cent respectively. The results on only two items changed more than one response category between the two data collection sessions indicating considerable congruence between them.

Report of the External Evaluator

This report is based on the responses of the teachers of the St. Matthews and Avonmore school in Edmonton, where the PREP Program was implemented from January to May, 1979.

Following the implementation of the PREP program, three teachers from each of the schools who were involved in the project were requested to complete a structured questionnaire consisting of 30 questions. The questionnaire was constructed to obtain the teachers' opinions on the effectiveness of the PREP Program in its various phases. A few weeks later, all six teachers were interviewed with the same set of questions. The interview took place with the teachers individually in their respective schools. There was considerable agreement over all response categories on the two successive occasions by each teacher. Furthermore, a considerable within-group agreement was also obtained for many of the items in the questionnaire.

This report consists of six sections: (a) Value of PREP Program materials, (b) Effectiveness of the Inservice Program, (c) Program implementation, (d) Program effectiveness, (e) Comments and suggestions of the teachers, and finally (f) An overview of the PREP Program.

PREP Program Materials:

All the teachers gave favourable to very favourable responses when asked to evaluate the organization and the effectiveness of the program materials which included the Free Play Inventory, Individual Student Profile, and Individual Task Sequences for teaching the target skills during individualized instruction. They considered that the combination

of free play, individualized instruction, and group instruction was very effective in helping them achieve the goals of their physical education program. There was unanimous agreement among the teachers that the Free Play Inventory was a valuable instrument in introducing them to the play skills of the PREP Program. Half of the teachers judged the usefulness of the Individual Student Profile to be valuable in the assessment of the students' play skill, while the other half considered that it was very valuable. With the exception of one teacher, who considered the usefulness of the task sequences as valuable, all others judged that the task sequences were very valuable in helping them during individualized instruction. In the interview phase, all of the teachers expressed that the various responses prompting categories were very helpful in meeting the individual needs of the children during instruction.

The question with regard to the appropriateness of the target skills was met with 'somewhat appropriate' and 'appropriate' responses, but not with 'highly appropriate' responses, because all of the teachers felt that some of their students required target skills at a higher level. The responses with regard to the value of the recording procedures were not clear-cut. Two teachers judged them to be of 'some value', while 3 teachers considered them to be 'valuable', while only one teacher thought that they were 'very valuable'. The reason for this disagreement was related to the amount of time they had to spend in recording the students' progress. Half of the teachers considered that the amount of time spent was 'too excessive', while the other half thought that the amount of time was a 'great deal but warranted'. With the exception of one, all of the teachers believed that the group play activities

were 'appropriate' for the children in their respective classes. Four teachers considered that the slide-tape packages were 'very valuable' in helping them to understand the target skills, their sequences and the response categories. One teacher thought that the slide-tape packages were 'valuable', while another considered them to be of 'some value'. The latter two teachers were hesitant to judge the usefulness of the slide-tape package, because of its late arrival in the PREP implementation phase.

PREP Inservice Program:

The answers of all the teachers were within 'favourable' to 'very favourable' range in response to questions aimed at evaluating the organization and the effectiveness of the inservice program. The lectures were helpful to them in understanding the PREP program. The usefulness of the audio-visual materials was considered to be 'very effective' in preparing the teachers to implement the program. There was unanimity among the teachers that the amount of time spent in inservice training session was 'sufficient'. All the teachers but one, agreed that the written materials were 'valuable' in preparing them to implement the program; the one exception expressed that the written materials were 'very valuable' to her in the implementation of the program.

Program Implementation:

All the teachers gave a generally favourable response with regard to the implementation of the PREP Program. Five of the six teachers considered that the four-month implementation period was 'sufficient' for establishing the PREP Program; however, one teacher expressed that the four-month period was 'insufficient'. The amount of time per week available for the PREP Program was judged to be 'somewhat appropriate'.

The role of the program consultant in the implementation of the program was evaluated very positively by the teachers. The frequency and the length of the visits of the program consultant was adequate. All but one teacher were highly satisfied with the professional relationship that the consultant established with them. For instance, one of the teachers judged the professional relationship of the consultant to be 'effective' but not 'very effective'. When asked to comment on this response, the latter teacher felt that the consultant should have provided firmer direction in her interactions with the teachers.

Program Effectiveness:

In general, the teachers felt that they and their students gained considerable knowledge as a result of participating in the PREP Program implementation project. Five of the six teachers expressed that they had gained markedly in their abilities to teach gross motor play skills to their students. One teacher felt that she gained some ability in teaching her students but it was not as much as the others gained from it. While asked to evaluate whether the skills they learned were of any help to them in other classes, half of the teachers thought that they were very helpful, whereas the other half judged those to be of some help. One of the teachers commented, "I utilize this task-sequence approach even in teaching the cognitive skills to my children". There was unanimity among the teachers that the students in their respective classes demonstrated marked improvement in motor play skills as a result of participating in the PREP project. However, with regard to the improvement in their students' social play skills, the responses were divided, half of the teachers felt that some improvement occurred in social play skills, whereas the other half considered that this improve-

ment was considerably higher for their students. With the exception of two, all of the teachers felt that the PREP Program should be made a part of the physical education program in other schools. Only two teachers suggested that some minor modifications should be made before it could be judged as suitable for implementation in other schools.

Teachers' Comments and Suggestions:

The following are some of the suggestions made by the teachers:

1. All of the teachers felt that some of the children in their respective classes were operating in their motor skills at a level higher than the ones provided for by the PREP Program. Hence, they suggested that task-sequences for higher level motor skills, e.g. play, swimming, track and field, and other sport skills be developed.
2. Regarding the PREP Inservice Program, some of the teachers felt that more group discussions during the initial phases of the inservice program, would have been very helpful to them.
3. Many teachers were not comfortable with the amount of time spent in the recording procedures in monitoring their students' status. They suggested that some modifications should be made in the recording procedure before the program is implemented in other schools. But they were unable to suggest what these modifications should be. However, one teacher suggested that the recording time could be considerably reduced if check lists were prepared and pasted on the walls of the gymnasium.
4. Three of the six teachers suggested that the program be started earlier during the year, e.g., September. All the teachers suggested that 3 to 4 forty-minute classes per week would be

appropriate for the implementation of the program.

5. All of the teachers recommended that the PREP Program could be successfully implemented in other schools. With some slight modification here and there as suggested earlier in its various phases, the PREP Program would be really an excellent one.

An Overview of the PREP Program

In general, the PREP Program was highly effective in teaching gross motor skills to the students. The teachers were highly impressed with the manner in which the task sequences for teaching various motor skills were outlined, and the specification of the response prompting categories. The hierarchical task sequences with accompanying response categories helped them in meeting the individual gross motor needs of their children. The children, who were in the schools for a couple of years and could not learn gross motor skills, showed marked improvement to the satisfaction of their teachers, as a result of participating in the PREP Program. The gain was noticed not only in the students' learning of motor skills, but also in the teachers' ability to teach those skills to their children with more confidence and success. The teachers were enthusiastic, especially about the task sequence approach, and they felt that their attitude toward the whole process of teaching motor skills was reoriented. Some of the teachers even felt that they could utilize this orientation in teaching various cognitive skills to their children. Some teachers felt that the PREP Program would be of considerable help in teaching the motor skills to other mentally handicapped children.

The PREP Inservice Program was very helpful to the teachers except that more group discussions were needed at this stage. The role of the

program consultant was very highly appreciated by the teachers. The written and the audio-visual materials were really very helpful in the assessment of the students' entering behaviors and in monitoring the status and the progress of the children on the target skills.

However, some considerations should be made to improve the quality of the PREP program. Modifications in the recording procedure are required. The program should be extended by developing improved task sequences, that teach more difficult motor and sports skills. The program should be implemented earlier in the year and the appropriate time allotment per week should be sufficient to facilitate individual student progress.

In short, the PREP Program was highly effective and successful and with some slight modifications as suggested earlier the implementation of this program should become a successful part of the physical education curriculum for young moderately mentally handicapped children.

Overview of Program and Comments of the Program Consultant

Judging from the response of the students and subsequent data collected, the PREP program in general must be considered appropriate and successful within the confines of this study. As to be expected, in the initial implementation of the program, there was a period of adjustment allowing for teacher familiarization with the instruments and the program and student and teacher acceptance of the free play model. Free play assessment proved to require too much time and therefore a structured approach was instituted. Individual instruction improved as teachers became more familiar and adept at working with the task sequences; however, recording procedures in all cases proved inconvenient. Unfortunately, the group work aspect of the program was never routinely established since the analysis of teaching required a great deal of time and a more concentrated effort than the final stages of the program permitted. However, skill instruction and skill acquisition improved continually throughout the implementation period and provided the most positive thrust of the PREP program.

The next section of this report presents the recommendations of the Program Consultant regarding the future implementation of the PREP Program.

Recommendations of the Program Consultant:

That:

- 1) The program be held at least three times per week for a forty minute period with no other conflicting regularly scheduled activities;
- 2) The equipment necessary for the target skill be available for all classes over the instruction period;
- 3) Group work be introduced as a regular part of each class in the initial stages of the program to establish a routine;
- 4) Assessment be structured to insure completion in a reasonable time;
- 5) As well as a low pupil/teacher ratio, the total number of students in the area should be limited to maximize equipment time for each pupil;
- 6) Teaching analysis be attempted only after the daily class routine is established, i.e. individual instruction and group work and considerably more time be allotted to instruction refinement;
- 7) The recording procedures be altered to be less onerous and time consuming, e.g. check lists, interval assessment, etc.;
- 8) The PREP program be continued and become a regular part of the curriculum for these students; and
- 9) The task sequences be expanded to include additional skills and activities.

CONCLUSIONS

The first major objective for this field test project was: the development, implementation, and formative evaluation of an inservice training package designed to help teachers of young moderately mentally handicapped children implement an individualized instruction play program based on the PREP Program materials and methods.

The results of the structured questionnaires and the external evaluator's interviews with the teachers and aides provide clear support that the inservice training program effectively helped the teachers implement the PREP Program.

The second major objective was: the provision of on-going field consultations on the implementation and monitoring of the program to the teachers during selected physical education periods over the program evaluation period.

Again, based on the responses of the teachers and aides, it can be concluded with considerable confidence that the program consultant provided valuable leadership and advice throughout the implementation period.

The third major objective of the field test project was: the formative evaluation of the PREP Program curriculum materials and methods during the program evaluation period.

Essentially, teachers seem to be interested in three key aspects of any program model: (a) what to teach, (b) how to teach it, and (c) how to assess learning. The teachers agreed that the PREP Program certainly helped them in what to teach as they stressed the value and

effectiveness of the available task sequences and requested that more skills be task-analysed for inclusion in the program. The response to the analysis of instruction was extremely positive and the teachers perceived that it increased their awareness of and helped them improve their individual instruction techniques. Though the daily recording of progress proved onerous during this project, the procedures provided accurate data to evaluate individual pupil progress. In future, increased familiarity with the task sequences and recording procedures would probably alleviate some of the difficulties encountered by the teachers with regard to monitoring pupil progress. Furthermore, teachers may decide to record progress on a more limited basis when employing the PREP Program Model in their classes.

The teachers and aides involved in this project had no special training or experience in physical education which is probably quite typical of other special education teachers who might use the PREP Program. Therefore, the positive response of the teachers and aides to all aspects of the program except the time required to record pupil progress provides considerable hope that other teachers will be able to successfully use the PREP materials and methods.

The success of the program with regards to pupil progress met with mixed results. Many children demonstrated significant improvements in skill proficiency while others made minimal progress. As indicated in the discussion of the progress graphs, there is no doubt that individual instruction is required if the majority of these children are to optimally learn play skills. However, it should be recognized that the degree of success experienced by individual children depends on their capabilities and the ability of the teacher to use instructional strategies that meet

their needs.

The final objective of this field test project was: the completion of an objective evaluation of teacher feedback on the use of PREP materials and methods.

The results of the interviews with the teachers and aides, the report of the External Evaluator, the comments of the Program Consultant, and the individual progress graphs of the children all provide very positive objective evidence of the value and effectiveness of the PREP Program.

RECOMMENDATIONS

1. The PREP Program should be considered for inclusion in the Physical Education Curriculum for young moderately mentally handicapped children throughout the Province.
2. Inservice training programs should be developed to distribute the PREP Program materials and methods to teachers who may wish to use it.
3. The PREP Program should be increased to include higher level motor skills that would be appropriate for older moderately mentally handicapped children.
4. Research on the analysis of individualized instruction in play skills and methods to improve the instructional skills of teachers should be continued.
5. The audio-visual aids and program materials developed through this project should be distributed through existing agencies to those teachers who wish to use them.

REFERENCES

- Watkinson, E.J. PREP: A Preschool Play Program for Retarded Children. Department of Physical Education, University of Alberta, 1976.
- Wall, A.E. Equipment preference and free play practice patterns of preschool moderately mentally retarded children, Proceedings of the First International Symposium on Adapted Physical Activity, Quebec, 1977.
- Watkinson, J. Play patterns of retarded preschoolers, Proceedings of the First International Symposium on Adapted Physical Activity, Quebec, 1977.
- Watkinson, E.J. and A.E. Wall, The PREP Program: A Preschool Play Program for Moderately Mentally Retarded Children, Proceedings of the First International Symposium on Adapted Physical Activity, Quebec, 1977.
- Watkinson, E.J. and A.E. Wall, The PREP Program: A Preschool Play Program for Moderately Mentally Retarded Children, Mental Retardation Bulletin, 6, 1, 1978 (a).
- Watkinson, E.J. and A.E. Wall, Research Methods and Measurement Techniques used in the PREP Program, Invited Paper presented at AAHPER Convention, Kansas City, 1978 (b).
- Watkinson, E.J. and A.E. Wall, PREP: A Preschool Play Program for Moderately Mentally Retarded Children, Invited Paper presented at AAHPER Convention, Kansas City, 1978 (c).
- Watkinson, E.J. and A.E. Wall, The PREP Play Program: Play Skill Instruction for Young Retarded Children. Department of Physical Education, University of Alberta, 1979.

APPENDIX A

SCHEDULE OF CLASSES

SCHEDULE OF CLASSES

Avonmore*

Monday 1:30 - 2:30 p.m. combined class (gymnasium)
2 teachers, 1 aide, 15 students

Thursday 1:30 - 2:00 p.m. combined class (utility room)
2 teachers, 1 aide, 15 students

* Each student has one additional half-hour of physical education per week which is not used for PREP.

St. Matthew*

January 12 - 17, 1979

Monday, Tuesday, Thursday, Friday - 11:20 - 12:00 a.m.
gymnasium
2 teachers, 1 aide, 15 students

January 17, 1979, on.

Monday, Tuesday, Thursday, Friday - 9:15 - 9:50 a.m.
gymnasium
1 teacher, 1 aide, 8 students

Monday, Tuesday, Thursday, Friday - 11:20 - 12:00 a.m.
gymnasium
1 teacher, 1 aide, 7 students

* Wednesday available if necessary.

APPENDIX B

INSERVICE EVALUATION FORMS

PREP Training Seminar Evaluation

Please complete the following questions so that we can improve our next seminar. Please write comments in the space provided or on the back of this sheet.

1. How effective were the lecture sessions in helping you understand the PREP Program?
a) ineffective b) somewhat effective c) effective d) very effective

2. How effective were the lecture sessions in helping you understand the PREP instructional methods?
a) ineffective b) somewhat effective c) effective d) very effective

3. How effective were the practicum sessions in helping you understand the PREP Program?
a) ineffective b) somewhat effective c) effective d) very effective

4. How effective were the practicum sessions in helping you understand the PREP instructional methods?
a) ineffective b) somewhat effective c) effective d) very effective

5. How effective were the audio-visual aids in helping you understand the PREP Program?
a) ineffective b) somewhat effective c) effective d) very effective

6. How effective were the audio-visual aids in helping you understand the PREP instructional methods?
a) ineffective b) somewhat effective c) effective d) very effective
7. How valuable were the written materials in helping you understand the PREP Program?
a) not valuable b) of some value c) valuable d) very valuable
8. How valuable were the written materials in helping you understand the PREP instructional materials?
a) not valuable b) of some value c) valuable d) very valuable
9. On the whole, would you consider sufficient materials were provided during the training seminar?
a) insufficient b) sufficient c) more than sufficient
10. On the whole, would you assess your experience in the total seminar to be:
a) not valuable b) of some value c) valuable d) very valuable
11. What changes would you recommend for the training seminar?

APPENDIX C

FREE PLAY INVENTORY

1. Running
2. Ascending Stairs
3. Descending Stairs
4. Jumping Down
5. Jumping Over
6. Hopping on One Foot
7. Forward Roll
8. Backward Roll

1. Ascending an Inclined Bench on Stomach
2. Ascending an Inclined Bench on Hands & Knees
3. Walking up an Inclined Bench
4. Jumping on a Trampoline
5. Seat Drop on Trampoline
6. Swivel Hips on Trampoline
7. Sliding Down a Slide
8. Climbing on a Box
9. Swinging on a Rope
10. Swinging on a Bar
11. Swinging on a Swing
12. Hanging from Knees on a Horizontal Ladder
13. Rolling Around a Bar
14. Ascending a Ladder
15. Descending a Ladder

1. Throwing
2. Kicking
3. Catching
4. Bouncing
5. Striking with a Hockey Stick
6. Stopping a Puck with a Hockey Stick
7. Passing a Puck with a Hockey Stick
8. Hitting with a Baseball Bat
9. Jumping a Rope Turned by Two People

1. Riding a Scooter (Sitting)
2. Riding a Scooter Down an Incline (Sitting)
3. Tummy Riding on a Scooter
4. Tummy Riding Down an Incline on a Scooter
5. Pulling a Wagon
6. Riding a Wagon
7. Riding a Tricycle
8. Riding the Back of a Tricycle

APPENDIX D

INDIVIDUAL STUDENT PROFILE

INDIVIDUAL STUDENT PROFILE

TEACHER'S NAME: _____

STUDENT'S NAME: _____

DATE: _____

SKILLS FOR LOCOMOTION

Running

1. Walks quickly
2. Runs with instances of non-support
3. Runs with bent arms moving in opposition to legs
4. Runs quickly, dodging obstacles

Ascending Stairs

1. Crawls up stairs on hands and knees
2. Ascends stairs marking time with support
3. Ascends stairs alternating feet with support
4. Ascends stairs alternating feet without support

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Descending Stairs

1. Descends stairs on seat
2. Descends stairs marking time with support
3. Descends stairs alternating feet with support
4. Descends stairs alternating feet without support

Jumping Down

1. Steps off box of shin height.
2. Jumps down off box of shin height, two foot take-off and landing
3. Jumps down off box of knee height, two foot take-off and landing
4. Jumps down off box of hip height, two foot take-off and landing

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Jumping Over

1. Steps over a line on floor
2. Jumps over a line, one foot to other foot
3. Jumps over a line, two foot take-off and landing

Hopping on One Foot

1. Stands momentarily on one foot
2. Bounces on one foot without leaving floor
3. Hops in place on one foot 3 times
4. Hops forward three times on one foot

Forward Roll

1. Rolls into sitting position
2. Rolls into squatting position

Backward Roll

1. Rocks backwards onto shoulders
2. Rolls over onto shins
3. Rolls over to crouch

SKILLS FOR LARGE PLAY EQUIPMENT

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Ascending an Inclined Bench on Stomach

1. Slides along bench on stomach by pulling with hands.
2. Slides up inclined bench on stomach by pulling with hands.

Ascending an Inclined Bench on Hands and Knees

1. Crawls along bench on hands and knees
2. Crawls up inclined bench on hands and knees

Walking up an Inclined Bench

1. Walks along a bench
2. Walks along a narrow bench or beam
3. Walks up an inclined bench.

Jumping on a Trampoline

1. Bounces on hands and knees
2. Bounces standing without leaving surface
3. Bounces with instances of feet leaving bed
4. Jumps consecutively

Seat Drop on Trampoline

1. Jumps, lands sitting on bed
2. Jumps, drops to seat, bounces back to feet
3. Drops to seat and continues jumping

Swivel Hips on Trampoline

1. Does seat drop, jumps and turns 90°
2. Does seat drop, jumps and turns 90° twice, and does another seat drop
3. Does seat drop and turns 180°, jumps and does another seat drop
4. Does seat drop and turns 180° to go directly into another seat drop

Sliding Down a Slide

1. Slides on seat
2. Slides on tummy, feet first
3. Slides on tummy, head first

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Climbing on a Box

1. Climbs onto hip high box
2. Climbs onto chest high box

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Swinging on a Rope

1. Holds on with hands while being swung
2. Holds on and locks legs while being swung
3. Swings on rope

Swinging on a Bar

1. Hangs from bar with hands
2. Steps off (bench) to hang on bar
3. Swings on bar
4. Swings on bar, returns to (bench)

Swinging on a Swing

1. Sits on seat and holds on while being pushed
2. Mounts swing and sits while being pushed
3. Pumps swing

Hanging from Knees on a Horizontal Ladder

1. Hangs from hands and knees on adjacent rungs of horizontal ladder
2. Hangs from hands and knees on single rung of horizontal ladder
3. Hangs from knees on horizontal ladder

Rolling Around a Bar

1. Supports himself grasping bar and flexing hips
2. Rolls over bar to sitting position on floor
3. Rolls over bar to land on feet

Ascending a Ladder

1. Ascends 5 rungs, marking time
2. Ascends 5 rungs, hands and feet alternately landing on same rung
3. Ascends 5 rungs, hands and feet alternately landing on next rung
4. Ascends 10 rungs, hands and feet alternately landing on next rung
5. Ascends 10 rungs, alternating hands and feet simultaneously

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Descending a Ladder

- 1. Descends 5 rungs, marking time
- 2. Descends 5 rungs, hands and feet alternately landing on same rung
- 3. Descends 5 rungs, hands and feet alternately landing on next rung
- 4. Descends 10 rungs, hands and feet alternately landing on next rung
- 5. Descends 10 rungs, alternating hands and feet simultaneously

Performs with a Physical Prompt
Performs with a Visual Prompt
Performs with a Verbal Prompt
Initiates in Free Play (No Prompt)

SKILLS FOR SMALL PLAY EQUIPMENT

Throwing

1. Drops ball into basket
2. Hurls ball using arm movement
3. Throws ball with shoulder rotation and overarm action
4. Throws ball with weight transfer to opposite foot

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Kicking

1. Pushes ball with foot
2. Kicks stationary ball, knee and hip swing
3. Walks forward, stops, kicks stationary ball
4. Walks and kicks stationary ball
5. Runs and kicks stationary ball

Catching

1. Traps rolling ball
2. Traps ball dropped into arms from one foot
3. Traps ball tossed between waist and chest from 5 feet
4. Catches ball with two hands

Bouncing

1. Drops ball, chases it and picks it up
2. Drops ball and catches it with two hands
3. Drops ball, bounces it once and catches it
4. Drops ball, bounces it twice and catches it
5. Bounces ball several times and catches it

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Striking with a Hockey Stick

1. Pushes a stationary puck with hockey stick
2. Swings stick to hit puck
3. Steps and hits puck

Stopping a Puck with a Hockey Stick

1. Stops puck directed towards stick
2. Moves forward to stop puck
3. Turns to stop puck on forehand
4. Turns to stop puck on backhand

Passing a Puck with a Hockey Stick

1. Passes puck between benches to a partner
2. Passes puck to a partner from 8 feet
3. Passes puck to a partner from 15 feet

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Hitting with a Baseball Bat

1. Pushes a suspended tether ball with bat
2. Hits a suspended tether ball with bat
3. Hits an oncoming tether ball with bat
4. Hits a tossed ball with bat

Jumping a Rope Turned by Two People

1. Jumps up and down with a two foot take-off and landing
2. Jumps once over a rope swung back and forth to feet
3. Jumps continuously over a rope swung back and forth in a slight arc
4. Jumps continuously over a rope swung over child's head

SKILLS FOR PLAY VEHICLES

Riding a Scooter (Sitting)

1. Sits on scooter while being pushed
2. Sits on scooter, pushes with both feet to travel backwards
3. Sits on scooter, pushes alternately with feet

Riding a Scooter Down an Incline (Sitting)

1. Sits on scooter, travels down incline with assistance
2. Sits on scooter, lifts legs after initial push from teacher
3. Pushes back with hands to initiate movement

Tummy Riding on a Scooter

1. Lies on tummy on scooter while being pushed
2. Lies on tummy, pushes back with both hands repeatedly
3. Lies on tummy, pushes back with hands and glides with hands and feet off floor

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

Performs with a Physical Prompt
 Performs with a Visual Prompt
 Performs with a Verbal Prompt
 Initiates in Free Play (No Prompt)

Tummy Riding Down an Incline on a Scooter

1. Lies on tummy, travels down incline with assistance
2. Lies on tummy, lifts legs after initial push from teacher
3. Pushes back with hands to initiate movement and lifts feet and hands

Pulling a Wagon

1. Pulls wagon around obstacles
2. Pulls wagon containing object
3. Pulls wagon with someone in it

Riding a Wagon

1. Kneels in wagon being pulled
2. Kneels in wagon holding handle and pushes with one foot on floor while being pushed from behind
3. Kneels in wagon and pushes with one foot on floor

Riding a Tricycle

1. Sits with feet on pedals while being pushed
2. Pedals after initial push
3. Pedals forward, 1/2 revolution, pedal pre-set
4. Pedals forward from stopped position
5. Steers tricycle around obstacles

Riding the Back of a Tricycle

1. Stands on back of tricycle, holding shoulders of rider
2. Stands on back of tricycle, holding handlebars and pushing with one foot

Performs with a Physical Prompt

Performs with a Visual Prompt

Performs with a Verbal Prompt

Initiates in Free Play (No Prompt)

APPENDIX E

GUIDELINES FOR PROGRAM IMPLEMENTATION

Guidelines for Program Implementation

1. The teachers will prescribe 3-4 target skills for testing, instruction and multiple-baseline control purposes.
2. During the week of 22 January 1979, the teachers will begin instruction on 1-2 target skills with each child depending on the needs of the children. Pupil progress will be recorded on all instruction days.
3. For inter-tester agreement purposes, the program consultant will test two of the target skills for each child on random dates during the program implementation period.
4. Initiation of instruction on a control target skill will start approximately four and eight weeks after 22 January, 1979. Control target skills will be tested once every two weeks throughout the program implementation period.
5. Each school will be visited three times within each two week period during the implementation period by Cheryl Castle, the Program Consultant.
6. The present plans are to implement the individualized instruction phase of the project for twelve weeks starting 22 January, 1979. Therefore, data will be collected on pupil progress on approximately 36 separate teaching days. Immediately following the Easter vacation, a decision will be made whether the program implementation phase should be extended.
7. The teachers and teacher-aides will be interviewed for program evaluation purposes shortly after the end of the program implementation period.

APPENDIX F

RECOMMENDED EQUIPMENT

RECOMMENDED EQUIPMENT

LOCOMOTOR SKILLS

open space of 20' length
stairs with a railing or near wall
benches or boxes of varying heights (3" to 36")
lines or tape on the floor
one rope or stick
mats or landing pads

PLAYROOM SKILLS

wagon
tricycles (of different sizes if possible)
scooters
trampoline
wide ramp
suspended vertical rope

PLAYGROUND SKILLS

playground slide
climbing apparatus with adjustable horizontal bars
(24" high to 5' high)
swing or rope suspended in loop from horizontal bar
mats

BODY CONTROL SKILLS

climbing apparatus with vertical ladder
bench or beam (inclined)
boxes or benches (36" high)
mats

OBJECT CONTROL SKILLS

tennis balls or whiffle balls (not more than 3" in diameter)
bean bags (optional)
large light balls (not less than 8" in diameter)
plastic hockey sticks
plastic baseball bats with large head

PREP PROGRAM IMPLEMENTATION PROJECT
DEPARTMENT OF PHYSICAL EDUCATION
UNIVERSITY OF ALBERTA

PROGRAM EVALUATION

Please answer the following questions, circling the response which best expresses your opinion on each topic. Feel free to comment on any question in the space provided and please complete the general questions at the end of each section.

PREP PROGRAM/MATERIALS

1. How effective do you feel the combination of free play, individualized instruction and group instruction was in helping you achieve the goals of your physical education program?
a) not effective b) somewhat effective c) effective
d) very effective

2. How valuable was the Free Play Inventory in introducing you to the play skills of the PREP Program?
a) not valuable b) of some value c) valuable d) very valuable

3. How valuable was the Individual Student Profile in the assessment of your students' play skill?
a) not valuable b) of some value c) valuable d) very valuable

4. How valuable were the task sequences in helping you during individualized instruction?
a) not valuable b) of some value c) valuable d) very valuable

5. How valuable were the response categories (manipulation, prompting, etc.) in the instructional process?

- a) not valuable b) of some value c) valuable d) very valuable

6. How appropriate were the target skills for the children in your class?

- a) inappropriate b) somewhat appropriate c) appropriate
d) highly appropriate

If inappropriate, what changes do you recommend?

7. How valuable were the recording procedures in monitoring the status and progress of the children on the target skills?

- a) not valuable b) of some value c) valuable d) very valuable

8. How did you find the amount of time required for recording procedures?

- a) too excessive b) a great deal but warranted c) moderate
d) minimal

9. How appropriate were group play activities for the children in your class?

- a) inappropriate b) somewhat appropriate c) appropriate
d) highly appropriate

10. How appropriate was the amount of time per week available for the PREP Program?

a) inappropriate b) appropriate

What would you recommend as an appropriate time allotment (number and length of classes) for the PREP Program?

11. How valuable do you think the slide-tape packages would be in assisting teachers in learning about the target skills, their sequences and response categories?

a) not valuable b) of some value c) valuable d) very valuable

12. What changes would you recommend to be made in the PREP Program or materials (model, manual, assessment procedures, etc.)?

13. Do you think the PREP model and materials should be extended to include other areas of the physical education program, e.g. swimming, track and field, etc.?

PREP INSERVICE PROGRAM

14. How effective were the lectures in helping you understand the PREP Program?
a) ineffective b) somewhat effective c) effective d) very effective

15. How effective were the audio-visual materials in preparing you to implement the PREP Program?
a) ineffective b) somewhat effective c) effective d) very effective

16. How sufficient was the amount of time spent in inservice training sessions?
a) insufficient b) sufficient c) more than sufficient

17. How valuable were the written materials in preparing you to implement the PREP Program?
a) not valuable b) of some value c) valuable d) very valuable

18. What changes would you recommend for the inservice training program?

PROGRAM IMPLEMENTATION

19. Was the four month implementation period sufficient for establishing the program?
a) insufficient b) sufficient c) more than sufficient
20. How valuable was the Program Consultant during the implementation of the program?
a) not valuable b) of some value c) valuable d) very valuable
21. Were the number of visits by the consultant sufficient in terms of frequency and length?
a) insufficient b) sufficient c) more than sufficient
22. Was an effective professional relationship established by the consultant?
a) not effective b) somewhat effective c) effective
d) very effective
23. What recommendations would you make for the role of the consultant?
24. What recommendations would you make for the implementation of the program in other schools?

PROGRAM EFFECTIVENESS

25. As a result of participating in the PREP Program Implementation Project, I feel that I
- a) have gained markedly in my ability to teach my students gross motor play skills.
 - b) have gained some in my ability to teach my students gross motor play skills.
 - c) have gained little in my ability to teach my students gross motor play skills.
 - d) am no better able to teach my students gross motor play skills.
26. As a result of participating in the PREP Program Implementation Project, I feel that the skills I learned are:
- a) very helpful to me in other classes.
 - b) of some help to me in other classes.
 - c) of little help to me in other classes.
 - d) of no help to me in other classes.
27. As a result of participating in the PREP Program Implementation Project, I feel that my students have:
- a) shown marked improvement in motor play skills.
 - b) shown some improvement in motor play skills.
 - c) shown little improvement in motor play skills.
 - d) shown no improvement in motor play skills.
28. As a result of participating in the PREP Program Implementation Project, I feel that my students have:
- a) shown marked improvement in social play skills.
 - b) shown some improvement in social play skills.
 - c) shown little improvement in social play skills.
 - d) shown no improvement in social play skills.
29. As a result of participating in the PREP Program Implementation Project, I feel that PREP:
- a) should be made part of the physical education program in other schools.
 - b) should not be made part of the physical education program in other schools.
 - c) requires modification before it can be made part of the physical education program in other schools.

30. Do you have any other comments concerning the effectiveness of the PREP Program in

a) assisting teachers in acquiring teaching skills?

b) assisting students in acquiring play skills?

Thank you

PREP Program Staff

APPENDIX G

PROGRAM CONSULTANT ACTIVITY LOG

Program Consultant's Activity Log

December, 1978

- 8 - Meeting - C. Castle, D. Shatz, Dr. A.E. Wall, Dr. E.J. Watkinson
 - Review of In-service material, PREP model
 - Revision of Free Play Inventory, Individual Student Profile
- 20 - Meeting - C. Castle, Dr. E.J. Watkinson
 - Revision of task sequences
- 21 - Meeting - C. Castle, D. Shatz, Dr. A.E. Wall, Dr. E.J. Watkinson
 - Preparation for In-service I, materials, etc.

January, 1979

- 9 - Steering Committee Meeting, 1:00 p.m., Edwards Professional Bldg.
 - Presentation of PREP Field-test Project and discussion
- 10 - In-service I, 9:00 - 12:00 noon, Separate School Board Offices
 - Introduction and assessment
- 12 - Equipment delivered to the schools, e.g. tricycles, scotters, etc.
- 15 - Avonmore, 1:30 - 2:30 p.m., Callihoo Hamilton and Paziuk
 - in the main gym - Canadian climber, ropes, benches, mats, object control equipment
 - students rotate with speech therapy
 - free play assessment
 - request for wagon and AV presentation of sequences of motor skills, e.g. running, throwing
- 16 - St. Matthew, 11:20 - 12:00 noon, Belaire, Macdonald, Poxon
 - in gym - trestle equipment but no bar, stairs or slide
 - structured assessment, two classes in lines
 - question: "How do you feel about a less structured situation at the beginning of the course?"
- 17 - U. of A. - Dr. E.J. Watkinson
 - Review of AV materials
- 18 - St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - class has been split, Macdonald now at 9:15 a.m.
 - assessment continues, verbal cue requests
- Avonmore, 1:30 - 2:00 p.m., Callihoo, Hamilton, Paziuk
 - in utility room - trestle equipment, slide
 - free play assessment

January, 1979 (con't)

- 22 - In-service 11, 9:00 - 12:00 noon, St. Anthony Teacher Centre
 - Prescription, recording and graphing
- 25 - St. Matthew, 9:15 - 9:50 a.m., Macdonald, Poxon
 - structured assessment
 - tasks chosen for instruction
- St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - structured assessment
 - tasks chosen for instruction
 - stair climbing to be instructed at library time
- Avonmore, 1:30 - 2:00 p.m., Callihoo, Hamilton, Paziuk
 - in utility room - free play assessment
- 30 - St. Matthew, 9:15 - 9:50 a.m., Macdonald, Poxon
 - class becoming more free play oriented
 - individual instruction has begun

February, 1979

- 1 - St. Matthew, 9:15 - 9:50 a.m., Macdonald
 - free play, four receive instruction
 - some observer assessments done
 - need for some more advanced target skills
- St. Matthew, 11:20 - 12:00 noon, Belaire
 - free play, four receive instruction
 - some observer assessments done
 - need for some more advanced target skills, wagon delivered
- Avonmore, 1:30 - 2:00 p.m., Callihoo, Hamilton, Paziuk
 - utility room, free play - assessment only
 - verbal cue for skills not initiated
 - some observer assessments
 - wagon delivered
- 5 - St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - Stair climb instruction and assessment to be done at library time
 - instruction techniques and continuum reviewed
- Avonmore, 1:30 - 2:30 p.m., Callihoo, Hamilton, Paziuk
 - individual instruction begins - at least one skill per student prescribed, some have two
- 8 - St. Matthew, 9:15 - 9:55 a.m., Poxon
 - rearranged climbing apparatus to create more interest
 - reviewed instruction and spotting for some skills,

February, 1979 (con't)

- 8 e.g. rolls
- St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - question re running assessment
 - British Bulldog with group
 - bar for climber delivered
 - Avonmore, 1:30 - 2:00 p.m., Callihoo, Hamilton, Paziuk
 - free play, individual instruction
 - all students are being assigned a second skill
- 12 - In-service III, 9:15 - 12:00 noon, St. Anthony Teacher Centre
 - Group work, teaching and instruction
- 14 - U. of A. - Dr. E.J. Watkinson
 - review of group work examples
 - revised teaching continuum
- 15 - St. Matthew, 9:15 - 9:55 a.m., Macdonald, Poxon
 - review graphing procedures
 - instruction during free play continues
 - structured stair climb
- St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - review graphing procedures
 - instruction during free play
 - Avonmore, 1:30 - 2:00 p.m., Callihoo, Hamilton, Paziuk
 - review graphing procedures
 - instruction - task sequence clarifications
 - request for instruction slides
- 23 - Teachers' Convention
- 26 - St. Matthew, 11:20 - 12:00 noon, Belaire
 - equipment removed
 - free play, ropes and benches, British Bulldog
 - reminder to re-assess control skills and introduce new target skills for instruction
- Avonmore, 1:30 - 2:30 p.m., Callihoo, Hamilton, Paziuk
 - instruction on target skills
 - reminder to re-assess control skills and introduce new target skills for instruction
 - request for Open House AV materials for March 6, 1979
- 27 - St. Matthew, 9:15 - 9:55 a.m., Macdonald, Poxon
 - equipment returned and set up
 - review of spotting techniques for bar

March, 1979

- 1 - St. Matthew, 9:15 - 9:55 a.m., Macdonald, Poxon
 - equipment repair
 - individual instruction on tasks
 - group work - running - all students
- St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon, later Macdonald
 - Dr. A.E. Wall visiting
 - individual instruction continues in free play
 - Macdonald's class joins in at 11:40 to enable Dr. Wall to see all students
- Avonmore, 1:30 - 2:00 p.m., Callihoo, Hamilton, Paziuk
 - Dr. A.E. Wall visiting
 - dental hygiene visits scheduled
 - individual instruction continues in free play
- 5 - Avonmore, 1:30 - 2:30 p.m., Callihoo, Hamilton, Paziuk
 - some original skills put on maintenance
 - new skill introduced to each student
- 6 - Avonmore, Parents' Night
 - cassette-slide presentation outlining the program
 - videotape of the program with instruction, explanation, and demonstration of play
- 8 - St. Matthew, 9:15 - 9:55 a.m., Macdonald, Poxon
 - individual instruction continues
- St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - decision to introduce two wheeler
 - additional advanced skills required from Centre
- Avonmore, 1:30 - 2:00 p.m., Callihoo, Hamilton, Paziuk
 - individual instruction continues
- 12 - St. Matthew, 9:15 - 9:55 a.m., Macdonald
 - free play
 - individual instruction for four
 - bicycle introduced
- St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - videotaping of teaching episodes
 - free play and individual instruction
- Avonmore, 1:30 - 2:30 p.m., Callihoo, Hamilton, Paziuk
 - in gymnasium, free play and individual instruction
- 15 - St. Matthew, 9:15 - 9:55 a.m., Macdonald, Poxon
 - finishes observer assessments
 - individual instruction continues

March, 1979 (con't)

- 15 - St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - finished observer assessments
 - individual instruction continues
 - tee-ball delivered for hitting with a bat
 - teaching analysis handouts delivered - for information only, need not as yet be completed but are to be used to assist in videotaping
- Avonmore, 1:30 - 2:00 p.m., Callihoo, Hamilton, Paziuk
 - teaching analysis handouts delivered
 - discussion on videotaping to be done the following week
 - tee-ball delivered
 - suggestion to begin group work now
- 19 - 23
 - No visitations
 - St. Matthew - formalizing group work
 - videotaping teaching episodes and group work
 - Avonmore - videotaping teaching episodes
- 26 - 30
 - Spring Break

April, 1979

- 2 - St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - free play after holiday - initiation
 - instruction on tasks initiated by students
 - maintenance schedule
- Avonmore, 1:30 - 2:30 p.m., Callihoo, Hamilton, Paziuk
 - instruction continues
 - videotaping completed
 - group work not established, some jumping down
- 3 - St. Matthew, 9:15 - 9:55 a.m., Poxon
 - group activity - turns, ball in basket
 - bouncing
 - free play assistance where required
- 5 - St. Matthew, 9:15 - 9:55 a.m., Macdonald
 - group work - Ring around a Rosie
 - relays - scooter, ball
 - free play
 - taping machine is being repaired
- St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - class delayed - celebrant mass
 - free play
- Avonmore, 1:30 - 2:00 p.m., Callihoo, Hamilton, Paziuk

April, 1979 (con't)

- 5
 - free play
 - videotaping - one additional teaching episode
 - free play in utility room
- 9 - In-service IV, 9:15 - 12:00 noon, St. Anthony Teacher Centre
 - Analysis of instruction - videotapes
 - Discussion of group activities
 - two wheel bicycles distributed
- Avonmore, 1:30 - 2:30 p.m., Callihoo, Hamilton, Paziuk
 - visitor from behavior management
 - in gymnasium larger bicycle introduced
 - free play and individual instruction
- 12 - Special Education PD Day
- 13 - 16 - Easter
- 19 - St. Matthew, 9:15 - 9:55 a.m., Macdonald, Poxon
 - group work formalized - tambourine, etc. hoops, jumping, obstacle course, taking turns, en masse - good session!
- St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - group work formalized - tambourine to call students from free play - running skills, races
- Avonmore, 1:30 - 2:00 p.m., Callihoo, Hamilton, Paziuk
 - in utility room - free play and instruction
- 23 - St. Matthew, 9:15 - 9:55 a.m. - field trip
- St. Matthew, 11:20 - 12:00 noon - teacher conference
- Avonmore, 1:30 - 2:30 p.m., Callihoo, Hamilton, Paziuk
 - individual teaching - bicycle used with training wheels
 - group work - jumping down - together, turns
- 26 - St. Matthew, 9:15 - 9:55 a.m., Macdonald, Poxon
 - complete PREP class
 - free play with individual instruction - control skills are being instructed with progress seen in most cases
 - group work - running - obstacles
 - jumping over - in turns
 - free time with bikes, cars, wagons, etc.
- St. Matthew, 11:20 - 12:00 noon, Belaire, Poxon
 - individual instruction in free play
 - group work - running - altogether, turns, races, to retrieve objects

April, 1979 (con't)

- 26 - Avonmore, 1:30 - 2:00 p.m., Hamilton, Paziuk
 - free play with individual instruction
 - group work - running - obstacles, lines, turns
 - a great deal of assistance required
 - last day for the program
- 30 - St. Matthew, 9:15 - 9:55 a.m., Macdonald
 - free play, individual instruction for four
 - group work - running obstacle course and jumping over two at a time
 - program content will continue but last day for research project, recording will not be continued and track and field skills will be introduced
- St. Matthew, 11:20 - 12:00 noon, Belaire
 - free play, individual instruction for four
 - group work - warm up exercises, over and under benches
 - bicycles, tricycles, etc. out for use

May, 1979

Program evaluation form drawn up, delivered to schools and collected.
All data collected.

June, 1979

External evaluator interviews held and report submitted.
Informal meeting of the group to discuss the overall program and its effectiveness.

APPENDIX H

INTER-RATING OF TEACHERS' ANSWERS ON
THE QUESTIONNAIRE AND INTERVIEW RESULTS.

Inter-rating Agreement of Teacher's Answers
on the Questionnaire and Interview Results

<u>Program Evaluation Section</u>	<u>Question</u>	<u>Percentage Agreement</u>
A. PREP Program/Materials	1	83
	2	67
	3	83
	4	100
	5	50
	6	50
	7	100
	8	83
	9	67
	10	83
	11	33
B. PREP Inservice Program	14	67
	15	83
	16	100
	17	67
C. Program Implementation	19	83
	20	83
	21	100
	22	67
D. Program Effectiveness	25	67
	26	100
	27	100
	28	83
	29	100
Average		85

